

Acknowledgements

The Harold Hyam Wingate Foundation (Wingate Scholar 2008) for sanctioning the value of this research and for financial support.

My supervisors, Dr. Geoffrey Tyack and Professor Stephen Ward for their wisdom and encouragement. Dr. Mara Keire who read drafts and advised on the US research. My family, particularly my husband, Jeremy Thorowgood for his constant patience; my parents, Tiggy and Jeremy Chance, and my children and step-daughters, William and Joanna Beaufoy and Hatty and Cottia Thorowgood for their encouragement and understanding. My friends, in particular the 'Book Group Girls', Sarah and Hugh Crisp, Katie Field, Michael Pirie, Deirdre Price, Ellie Roberts, Debbie Sandler, Roz Spiro, Clare Taylor.

Historians of gardens and parks, Hazel Conway, Clare Hickman, Janet Waymark, Rebecca Preston, Karen Jessup, Amanda Rees, Joanna Matthews.

Sir Adrian Cadbury, Benedict Cadbury, Dolly Green, Sonja Bata, Bill Anderson (former Chairman of the NCR), Ian Ormerod (former Director of the NCR, UK). Alan Shrimpton and Janet Mawson of the Bournville Village Trust. Charles and Margo Burnette for helping with research in Philadelphia. John Boylan, Paul Springer and Bill Schaaf of Buckinghamshire New University for giving me a sabbatical to complete the thesis.

My American friends and former students Carolyn Johnson and Krysta Johnson and her parents and Lena Brodersen and Peter Malcolm. Bruce Jackson at Disney ESPN.

Librarians and archivists:

Especially thanks to Jeff Opt at the National Cash Register archive in Dayton, Ohio and Sarah Foden, the Cadbury archivist and Keith Tandy at Cadbury.

The staff of the Bodleian Library and the Vere Harmsworth Library in Oxford for their unstinting professionalism; Carol Lockman, Marge McNinch, Jon Williams and other staff at the Hagley Library, Wilmington, Delaware for their help and hospitality.

Michael Dosch, Frederick Law Olmsted Historic Site; Judith Wright, Archivist, Boots Co. Ltd; Maria Erskine, Nottingham Museums; Lorna Davidson, The New Lanark Trust; Bob Lancaster, Vicky Rawlings and Lindsay Duncan, First Garden City Heritage Museum, Letchworth; Barbara and Erik Allen and Winifred Price, Bata Reminiscence and Resource Centre; Andrew Pyne, Corporate Affairs, Shredded Wheat factory, Welwyn Garden City; Cathy Roy, Reference Dept., Niagara Falls Public Library; Becky Haglund Tousey and Carol Palumbo, Kraft Archives; the late Frank Davies, Kings Langley Local History and Museum Society; Dr. Amanda Jones, Archivist, Borthwick Institute for Archives, University of York; Lesley Owen-Edwards, Unilever Archivist, Mill Green Museum, Hatfield, Herts; Terry Gray, PR and Media Manager, Letchworth Garden City Heritage Foundation; Anne W. Stewart, Acting Librarian, Crawford County Historical Society; the staff of the Manuscripts Division of the Library of Congress, Washington DC and the staff of Historic Pullman.

Contents

Acknowledgments	i
Abstract 1	iii
Abstract 2	iv
Abbreviations	ix
Introduction	1
Chapter 1: From Model Factory to Modern factory	34
Chapter 2: The Evolution of Factory Landscapes	58
Chapter 3: ‘The Factory in a Garden’ ‘The Garden in a Factory’	98
Chapter 4: ‘Happy healthy workers are the world’s best’	132
Chapter 5: Mobilising the Modern Industrial Landscape	162
Chapter 6: The Landscape Architect and the Design of Company Parks	184
Chapter 7: ‘The Most Beautiful Factory in the World’: Corporate Identity and the Power of the Garden Image	208
Chapter 8: Factory Gardens and Parks: for Whose Benefit?	238
Chapter 9: Conclusion	271
Appendix 1: Case Studies	284
Appendix 2: Factories with Gardens and Parks, c.1800-c.1950	289
Bibliography	309
Picture credits	338

Abstract 1

'The Factory in a Garden': Corporate Recreational Landscapes in England and the USA, 1880-1939

Helena Chance

DPhil, Kellogg College, Oxford

Michaelmas Term, 2010

From the 1880s, a new type of designed green space appeared in the industrial landscape in England and the USA - the factory pleasure garden or park. At the same time, industrialists began to enhance their office and factory buildings with landscaping and planting, and some opened allotment gardens for the children of factory workers. The making of gardens and parks around or near office and factory buildings, designed by professionals, was driven by belief in the value of gardens and parks to recruitment and retention of staff, to industrial welfare, and to advertising, corporate identity and public relations.

The thesis will show how industrialists appropriated the historical, cultural and metaphorical meanings of gardens in a bid to redefine industry as progressive and responsible and to shift the image of factory labour from unhealthy and exploitative to healthy, caring, respectable and sociable. The thesis will argue that companies employed landscape professionals to contribute to a positive image of industry and industrial development in the suburban or rural landscape, and to harmonise industry and nature. It will show how the factory gardens and parks supported numerous and varied opportunities for outdoor recreation that in some districts would not have been so readily accessible to working people, particularly to women and young people. The thesis will show how companies exploited the social and cultural capital of gardens and recreation space through photography, illustration and film for promotional purposes. It will suggest that although the sporting and other outdoor recreational opportunities at factories were likely to be beneficial to many, the greater value to companies of factory pleasure gardens was in advertising and public relations. The thesis will build on existing research that highlights the valuable contribution of industry to sports and recreation provision in this period. It will also suggest that industry had more influence on gardens and gardening than is currently understood.

Abstract 2

'The Factory in a Garden': Corporate Recreational Landscapes in England and the USA, 1880-1939

Helena Chance

DPhil, Kellogg College, Oxford

Michaelmas Term, 2010

From the 1880s, a new type of designed green space appeared in the industrial landscape in England and the USA - the factory pleasure garden and park. At the same time, industrialists began to enhance their office and factory buildings with landscaping and planting and some opened allotment gardens for the children of factory workers. Initially, these gardens or parks were created at model factories and were relatively few, but by the 1920s, the factory garden and park movement had inspired a significant number of industrialists to employ landscape and garden architects to maximize the amenity and aesthetic of their factories. Similar factory landscaping was taking place in mainland Europe, but the thesis focuses on the industrial landscaping of two English-speaking nations at a time when American industry was in the ascendant and when American companies were opening plants in England in increasing numbers.

Borrowing from theories developed in cultural geography and social science on the organization of space and place and the power relations that operate within social space, the thesis will examine the reasons why gardens and parks were made around or near office and factory buildings in England and America from 1880-1939. Theories of Utopian space or the organisation of space in an ideal world and society will also be considered because industrialists making gardens were attempting to create ideal working conditions, thus releasing their factories from connotations of exploitation.

Using company archives, the thesis will examine case studies, the major sources being the records of Cadbury, Bournville, UK and those of the National Cash Register Company, (NCR) in the USA. These companies became role models in corporate landscaping, exchanged visits and shared ideas on corporate welfare and marketing. Case studies included in the analysis are listed in Appendix 1. Appendix 2 lists other sites that have been discovered during the course of research. The discussion acknowledges similarities between factory gardens and parks and the parks of company towns and villages, and some of these will be discussed. However, the thesis will show that the factory garden and park emerged as a distinctive type that focused on the recreational needs of the factory workers themselves rather than the wider community. This type of garden and park has not so far been analysed as a factor in industrial history, planning history, or in histories of the emergent landscape architecture profession. In histories of landscape architecture, gardens and parks at

factories are given a passing mention in relation to garden cities, but they are generally associated with post-Second World War industrial development. The thesis will suggest that industry had more influence on gardens and gardening and outdoor recreation in the early 20th century than is currently understood, and the research will contribute to a new interpretation of factory design and society, which draws out the meanings of time and space in the factory that are not related to the production line.

The thesis will consider ideologies and values that motivated the making of the factory gardens and parks, from the personal values and motives of the industrialists concerned to the wider ideologies and needs of the industrial society for whom they were made. Through research into responses to gardens and parks from industrialists, social welfare professionals and the workforce, the thesis will analyse the reasons why factory gardens and parks were considered beneficial to recruitment and retention, to personal and social morality and health, to corporate relations, corporate identity, public relations and to the industrial landscape. The thesis will build on existing research that highlights the valuable contribution of industry to sports and recreation provision in this period. It will suggest that although many blue-collar workers participated in and welcomed workplace sports, outdoor recreation at some plants was more popular with white-collar employees. It will also suggest that company sports programmes and clubs were of most benefit to working women and to young people, because they had less access than men to recreational facilities outside the workplace.

The thesis begins with a contextual chapter that discusses the emergence of the idea of the model factory and the development of industrial welfare policies and practices. By the end of the 19th century, as more factories were built in suburbs or on the edge of cities, aided by electrification, companies had more space to dedicate to outdoor recreation. At the same time, accessibility to fresh air and to sports was becoming an important factor in worker welfare provision that was dedicated to improving the aesthetic, social and cultural life of factories and the health and morality of factory workers. The provision of, for example, dining halls, libraries, education and recreational facilities was regarded as part of a modern industrial outlook, and by the 1930s many companies were using architecture and design to enhance and promote their welfare provision. By the 1920s and 1930s, the concept of the model factory had developed into the 'modern' factory, as recreational amenities that were originally considered luxuries became more common and even expected in industrial life.

The idea of a factory garden pre-dates the 1880s, but the type of garden defined in the study emerged in the 1880s and 1890s at model factories. Industrialists such as Titus Salt, George Pullman, the Cadbury Brothers and John Patterson of the NCR, set important precedents in the scope and sophistication of the factory pleasure ground and park. The making of gardens at factories paralleled the public park movement in many respects, especially from the late nineteenth and early twentieth centuries, when more parks were made in working class areas. Landscaping at factories was also part of the drive for civic improvement, to beautify rapidly growing towns and cities. Yet the factory gardens were privately owned and managed and were subject to specific design considerations and rules of use. These factory landscapes added aesthetic and social value to companies, for they not only improved the environment, but also provided outdoor space for employee welfare (rest periods, sports and other outdoor events such as theatre), and for company events. They were also designed to reform

the health, character and morality of the working classes. At a local level, some industrialists became environmental mentors for their neighbourhoods by establishing themselves as the experts on landscaping and gardening and providing plants, seeds and advice to the neighbourhood. A garden or park was not a pre-requisite of a model or a modern factory, but those that had significant landscaped gardens and good recreation provision became some of the most celebrated factories. Between the Wars, sports provision and an attractive environment became accepted norms at large modern factories.

In a bid to redefine industry as progressive and responsible, industrialists appropriated the historical, cultural and metaphorical meanings of gardens to shift the image of factory life and labour from unhealthy and exploitative, to hygienic, respectable and sociable. An analysis of the garden as symbol and metaphor reveals that the factory gardens and parks were designed to provide both functional space for recreation, and to express status, aesthetic beauty, respectability, physical health and mental refreshment. The union of gardens and factories was a form of social engineering to manipulate employees and to promote industrial capitalism as respectable, responsible and sustainable; therefore the garden became an agent of control. The meanings of the gardens and recreation parks and the motives for providing them were therefore ambiguous. They were not welcomed by all employees, which made the garden metaphor in a factory context problematic.

The gardens and recreation parks supported numerous and varied outdoor activities, including 'respectable' music, dancing and gardening, which reflected ideals of 'rational recreation' - activities regarded by middle-class reformers as antidotes to popular and in their view, immoral working-class recreations. Therefore employees did not universally embrace the kinds of activities that took place in the gardens and recreation grounds. Although at many companies, members of the workforce organised recreational activities themselves, the activities took place within traditional power structures, many were middle class in tone and white-collar employees tended to dominate social clubs. However, access to garden and park space during or after the working day was a relative luxury, for not all communities had access to local social, cultural or sporting activities.

The company recreation parks offered a variety of sports for working class as well as for middle class employees. Those made in the first four decades of the 20th century were, like new municipal parks, conceived and designed according to rapidly developing theories and practices of sports considered necessary for successful, modern industrial societies. By 1910 there had been a brisk expansion in the number of companies providing sports and recreation activities for their employees at increasing levels of sophistication. Companies looking to provide the best facilities for their workforce commissioned professional garden and landscape architects to plan their parks. Some sports and recreation facilities at factories were equal to or even superior to public ones and more accessible. It is likely that some employees, particularly white collar workers, women and young people enjoyed sporting and other social activities in the workplace that would not have been so easily accessible or affordable elsewhere.

The recreation parks made at the NCR from the 1900s and Cadbury from the 1920s were role models for the new kind of company recreation park. They were designed to

satisfy the demands and expectations of sport and recreation provision in modern society. Both companies employed well-known landscaping firms and both provided space and amenities that were equal or superior to those provided in municipal parks. The NCR provided an easily accessible country park and club for its workforce on a scale and sophistication that was almost unknown for working-class people in the early 20th century. The NCR and Cadbury parks were not just functionalist landscapes, for as well as providing efficient spaces for organized sports, they were designed to provide a refuge from the daily rituals and routines of modern life. In addition, the landscape architects used design and planting to reinforce national landscape identities. Both landscapes symbolically combined technology, the natural and the pastoral so that nature and the machine became compatible.

The company parks and gardens were not only designed to provide for the recreation needs and wishes of the workforce, but they were also highly visible in corporate identity and public relations and to an extent in advertisements, both in real time and space through the factory tour, and in virtual space through representations of the factory and factory life in photographs, illustration and film. Sophisticated promotional methods adopted by the NCR influenced the Cadburys, who professionalised their factory tours and introduced lantern slide lectures following a visit to by George Cadbury Junior to the NCR. Images of the landscapes communicated powerful messages about the value of the gardens and outdoor recreation and the photographs and illustrations give considerable insight, through their unique form of communication, into attitudes of the management to the workforce in the period. Although photographs suggest multiple uses for the gardens and recreation grounds, they do not provide objective information about the workforce's attitudes to the recreation spaces, or how often they used them.

The final chapter reviews the benefits of the gardens and recreation grounds to employees from the points of view of employers and welfare professionals and from the employees themselves. The popularity and benefits of company sports grounds and gardens varied considerably from company to company and from worker to worker. The success of individual cases depended on a number of extraneous factors. These included the levels of control of the amenities allocated to the workforce, the degree of coercion to participate, the location of the factory in relation to other amenities, job and wage stability and security, reasonable working hours, a lack of interference in workers' private lives, respect for the management, and accessibility to the company parks for family and friends. Higher than average wages coupled with fair management and good facilities run by the workforce were the best conditions for successful and popular company recreation schemes, although some companies like Cadbury that did not pay particularly high wages were still popular places to work due to job security and respect for those at the helm. Arguably, of all the welfare amenities at factories, the gardens and parks were the places where workers had the most freedom and could exercise their power through assuming a position of responsibility on a works council or sport committee. They also provided space for a much-needed rest, a quiet moment, a release of pent up energy, or even to protest. Therefore, the gardens and parks contributed to some extent to a better quality of life at work.

In conclusion, by the 1920s and 1930s, a significant number of industrialists were exploiting the value of garden and landscape as symbol and metaphor in a factory

context as well as the social, physical and cultural benefits of outdoor recreation at work in a bid to attract and retain the best workers to increase productivity. They also made extensive use of landscape imagery in constructing their corporate identity, for advertising and for corporate and public relations. The patrons and designers of factory gardens looked to historical precedent to design the factory environment – a historical place based on a common understanding of an authentic, high-status place, with all the attributes of a respectable community. In making their estates, industrialists were place-making, creating their factories in the image of a country or suburban estate to express their ownership of the environment, and by association, of their workforce. To reinforce a sense of place, they used photography and illustration that largely idealised the industrial environment and mythologised the workplace by building narratives that connected past, present and future. Factory gardens and parks were designed for their potential to liberate the workforce and became powerful symbols of ideal conditions in industry. For many employees, the parks and to some extent the pleasure gardens contributed to a better quality of life at work. Others chose not to use the facilities, preferring to seek their recreation outside work. Some employees resented the facilities, preferring better pay and conditions instead. The greater value of gardens and landscaping to industry was therefore likely to have been in their contribution to profitability through advertising, branding and public relations, rather than in an increase in the productivity of the workforce.

With the expansion of industry in the suburbs or in the countryside, the landscaping of the elegant new factories in some areas became a factor in the aesthetic co-existence of residential and industrial development or the acceptance of a factory in a rural setting. By the 1950s, the provision of factory sports and recreation grounds at larger companies and basic cosmetic landscaping at the front of new factories had become the norm. Factory pleasure gardens, or at least an outdoor seating area with, trees, shrubs and flowers, or a roof garden, were common. By this time, landscaping commissions included an increasing number of industrial estates, and particularly in the USA, the corporate campus or park.

Abbreviations

The following abbreviations for archives have been used in the footnotes and picture credits:

BC: the Boots Company archive, Nottingham

BLRC: Borthwick Institute for Archives, University of York, Rowntree Collection

BRRC: Bata Reminiscence and Resource Centre, East Tilbury

CB: Cadbury, Bournville, company archive

FGCHM: First Garden City Heritage Museum, Letchworth Garden City

FLO.NHS: Frederick Law Olmsted, National Historic Site, Boston, MA

HL: Hertfordshire Libraries, Local Studies Section, Hertford

KA: Kraft Foods Archive, KRAFT foods INC., IL

LC.MD.OAR: Library of Congress: Manuscript Division, Olmsted Associate Records,
Washington DC

NCR.DH: National Cash Register Company Archive at Dayton History, OH

NCR.DH.bgl: National Cash Register Company Archive at Dayton History, OH,
'Boys' Gardens Lecture'

NCR.DH.fl: National Cash Register Company Archive at Dayton History, OH,
'Factory Lecture'

NCR.DH.lgl: National Cash Register Company Archive at Dayton History, OH,
'Landscape Gardening Lecture'

PSHS: Pullman State Historic Site, OH

PSVT.SV: Port Sunlight Village Trust, Sunlight Vision, Merseyside

UW.MRC: University of Warwick Modern Records Centre, Industrial Welfare Society archive

Introduction

Rationale

In this world of multinationals, companies no longer have an absolute sense of place. Their physical presence can be scattered across continents – Nestlé, the largest global food manufacturer, claims to have a factory in almost every country of the world. A company's real presence exists in virtual space, through a website, and via the product and corporate image, or brand. While some brands still profit by a national identity - Nestlé its 'Swissness' or Coca Cola a great American dream, the site of origin has become immaterial.¹ There are exceptions; for example the chocolate giants Cadbury and Hershey showcase their world famous factories through visits to 'Cadbury World' in Bournville, Birmingham UK and 'Hershey Chocolate World' in Hershey, Pennsylvania, but visitors today come to be entertained or to marvel at the products' history and production processes, not the material presence of the factory building and its landscape. Visitors arriving at Cadbury World by car would hardly be aware of the historic factory buildings and offices. Only those arriving by foot from Bournville Station might be surprised by the sophistication of the architecture and the acres of playing fields and gardens that still bound the factory buildings on the southern and eastern sides, a site that became renowned as 'The Factory in a Garden'.

From early on in the factory system of production it was not uncommon for factory architects to use the language of domestic architecture, or ornamental features like

¹ The local identity of some companies remains important to their workforce, for example the Boots Company, which has been manufacturing in Nottingham since 1885, is still a major employer in the city.

cupolas or clock towers to distinguish an otherwise utilitarian building.² Occasionally entrepreneurs dignified their firms by building veritable temples or palaces like the Templeton carpet factory in Glasgow built from 1889-92 by William Leiper, who borrowed his design from the Doge's Palace in Venice, or even a factory modelled loosely on a Roman theatre like the neo-classical Royal Salt Works at Chaux, by Ledoux built in 1776.³ By the middle of the 19th century, as advertising played an increasing role in marketing, a company would often promote the palpable image of its built environment as a part of the marketing strategy. By the early 20th century, factory landscapes as well as buildings were appearing in corporate promotional materials as a significant number of companies embellished factory and office buildings with trees, shrubs and flowers, made pleasure gardens and recreation grounds for their workforce, built greenhouses and employed gardening staff.

Gardens for factory workers were not a new idea for allotment gardens, and later parks, were common features of factory villages and towns from the late 18th century. Access to land for the working classes became an issue with reformers or radicals like the Chartists in the mid 19th century.⁴ However, by the late 1800s, many industrialists not building factory villages were looking for ways of improving employee welfare at the factory and one of these was the provision of outdoor recreational facilities. It became increasingly common for firms to provide sports grounds for their employees beside, or a short distance from the factory and by the 1920s and 1930s, sports grounds for larger factories had become almost mandatory. In addition to this, a small but significant number of firms made a pleasure garden as well as a sports ground for

² Darley, G. *Factory* (London, 2003). Darley suggests that Lombe's factory in Derby (1717-19) was probably the first mechanized factory in the world, p. 104

³ Pevsner, N. *History of Building Types* (London, 1997), pp. 282-286

⁴ Crouch, D. and Ward, C. *The Allotment: its Landscape and Culture* (Nottingham, 1997), p. 18

their employees and some companies provided combined sports and pleasure parks. Some commissioned professional designers to ensure high quality aesthetic and amenity for their factory gardens and parks. Garden styles at factories ranged from simple planting to ornament the approach to the factory entrance, to more elaborate landscaped parkland, to complete Italianate or French-style parterres. Factory landscapes were created as part of a social welfare movement dedicated to improving the aesthetic, social and cultural image and life of factories that included the provision of dining halls, libraries and education.⁵ Initially factories that provided such amenities were regarded as 'model', but by the 1920s and 1930s, they became more typical at large factories, increasingly built in the suburbs or on the edge of towns and cities.⁶ With the expansion of industry in the suburbs or in the countryside, the landscaping of the elegant new factories in some areas became a factor in the aesthetic co-existence of residential and industrial development or the acceptance of a factory in a rural setting. By the 1950s, the provision of factory sports and recreation grounds at larger companies and basic cosmetic landscaping at the front of new factories had become the norm. Factory pleasure gardens, or at least an outdoor seating area with trees, shrubs and flowers, or a roof garden, were common. By this time, landscaping commissions included an increasing number of industrial estates and particularly in the USA, the corporate campus or park.

The central theme of this thesis is the relationship between two productive spaces - landscapes designed for pleasure and leisure, and factories for work and economic output - with seemingly opposite functions and opposing metaphors: the machine and

⁵ Welfare for employees was also provided in other large commercial enterprises such as insurance companies and department stores.

⁶ In America, the relocation of industries to the suburbs began earlier than in Britain. See Jackson, Kenneth T. *Crabgrass Frontier. The Suburbanisation of the United States* (New York, Oxford, 1981), p. 183

the garden. The thesis will show how industrialists appropriated the historical, cultural and metaphorical meanings of gardens to refine corporate culture and to redefine industry as progressive and responsible. It will argue that industry had more influence, gardening culture and on outdoor recreation in this period than is currently understood. Analysing factories from the point of view of landscape has produced a significant new interpretation of factory design, society and culture, which draws out the meanings of time and space in the factory that are not related to the production line.

This study will contribute new knowledge to areas of research within a number of disciplines: to landscape, architecture and garden historians and cultural geographers researching the social and cultural functions and the psychological meanings of landscapes and gardens in modernism; to historians interested in the relationships between British and North American progressivism, industrial development and corporate culture; to social historians researching the culture of factories and the history of leisure in this period and to architects, landscape architects and conservationists working on post-industrial redevelopment. The study will also contribute to current debates on the architecture and culture of the developing suburbs, as it will show how the landscaping of factories became a significant feature in promoting the ambiance and values of suburban development.

The thesis will also be the starting point for a catalogue of lost or threatened industrial gardens and recreation grounds that have not yet been recorded by the English

Heritage Register of Historic Parks and Gardens or the US National Parks Service.⁷ It does not claim to have achieved a comprehensive documentation of factory gardens in Britain and America, but the appendices present a list of relevant sites that have been discovered in the course of this research.

Parameters

This study considers a period starting from the 1880s to the outbreak of War in 1939 and will focus on factory gardens and recreation grounds in England and the USA.

The idea of factory landscaping pre-dates the 1880s, but the types of factory landscapes defined in this study emerged in the 1880s and 1890s in England and the USA at factories regarded as ‘model’, under the patronage of industrialists such as the Cadbury Brothers at Bournville near Birmingham and John Patterson at the National Cash Register Company in Dayton, Ohio (NCR). These landscapes added value to companies for they not only improved the aesthetic environment, but also provided outdoor space for employee welfare (rest periods, sports and other outdoor events such as theatre), and for company events. These benefits, so they claimed, added economic, social and cultural value to the company by contributing to a more healthy, stable and productive workforce and enhancing the company’s profile in the local and public realm. José Harris has argued that the significant social changes that took place in the last quarter of the 19th century in Britain shaped the social processes and institutions of Britain in the 1920s and 1930s,⁸ and for the USA the rise of Progressivism in the 1880s and 1890s similarly shaped reform in the early 20th

⁷ Historic landscapes in the US are registered on the National Register of Historic Places or as National Historic Landmarks – the National Parks Service in the US Ministry of the Interior maintains both registers.

⁸ Harris, J. *Private Lives, Public Spirit: a Social History of Britain 1870-1914* (Oxford, 1993), p. 251

century. This research on the emergence of corporate recreational landscapes accords with this cohesive period of social change. By the 1930s, the gardens and recreation grounds of companies like Cadbury and the NCR were the prototypes for a significant number of firms in Britain and the United States to make gardens and recreation grounds to contribute to their welfare programmes and to improve the factory environment. By 1939, the factory pleasure garden and recreation ground had become established in the canon of industrial welfare and in the landscape architecture portfolio. The quarter century that followed the end of the Second World War saw the heyday of the factory garden, park and recreation ground together with the rise of the office campus, until globalisation and post-industrialisation saw the gradual retraction or demise of factory landscaping.

To limit the field, the contextual research has focused almost exclusively on England and the United States of America: there are good reasons to compare these two nations. The USA was rapidly replacing Britain as the leading industrial nation and can be said to have overtaken Britain by 1900.⁹ Industrialists and their representatives were crossing the Atlantic in both directions to keep abreast of new developments, mostly in technology, but also in industrial architecture and landscaping, advertising and industrial welfare.¹⁰ At the same time, the number of US companies opening plants in England accelerated in the first two decades of the 20th century and two of these, Shredded Wheat and the Spirella Corset Company, are

⁹ See Jeansonne, G. and Lührssen D. *'A Time of Paradox': America since 1890* (New York, Toronto, Oxford, 2006), p. xxi

¹⁰ See Rodgers, D. *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge MA, London, 1998)

important case studies in the thesis.¹¹ It is acknowledged that this focus will produce a view biased by Anglo-American culture and history and that the research will not take into account innovative practices in Scotland, Wales or Northern Ireland, or in mainland Europe in factory welfare and design.¹² There is evidence to suggest that the theory and practice of the model factory was more highly developed in northern European countries like Germany and Sweden than in the UK, although it is not known whether pleasure gardens and cosmetic landscaping were more common in these countries than in Britain and America.¹³

This study will focus on the types of factory landscapes that emerged from the 1880s and 1890s in England and the USA: ‘cosmetic’ landscaping of the factory buildings and environs, pleasure gardens (including roof gardens), children’s allotment gardens and factory sports and recreation grounds. These were gardens and parks that were designed as part of the recreation space that was integral to the factory, giving employees access to outside space during breaks and at lunchtime (for those who did not go home for lunch) or in evenings and at weekends. Some of the larger factory parks were accessible to employees’ families during the working week, and by the 1920s and 1930s, to friends, relatives and other local residents.

¹¹ Weightman, G. *The Making of Modern London 1914-1939* (London, 1984), p. 59. Weightman discusses the showpiece factories built along the Great West Road and points out that about 60% of the American firms which set up in Britain between the Wars, came to London’s western suburb.

¹² A number of Scottish factories are mentioned in the thesis, including in Appendix 2.

¹³ For contemporary accounts of factory gardens and recreation grounds in mainland Europe around 1900, see Gilman, N. P. *A Dividend to Labor: A Study of Employer's Welfare Institutions* (New York, 1899); Meakin, B. *Model Factories and Villages: Ideal Conditions of Labour and Housing* (London, 1905) and Price G. M. *The Modern Factory: Safety, Sanitation and Welfare* (New York, London, 1914)

To narrow the field, landscapes designed as part of a company town or village have largely been excluded.¹⁴ Parks and gardens designed as part of company towns and villages served the same functions in many respects as factory recreation grounds because factory workers and their families used them. However, these parks were designed to be part of a village or town environment, rather than added later to the factory environs; for example the parks at Goodyear Heights, the town built for employees of the Goodyear Tyre and Rubber Co. at Akron, Ohio which were half-a-mile from the factory.¹⁵ Goodyear was one of those industrial sites that included a town or village park *and* a factory recreation ground or playground together with cosmetic landscaping of the factory. Others incorporated the factory into the entire landscape scheme of the town. However, this research focuses on landscapes that were conceived as part of a factory, independent of housing. It is suggested therefore that this thesis has identified a type of garden and park not as yet articulated in social, industrial, architectural, planning and garden histories, or in histories of the emergent landscape architecture profession, the corporate recreational landscape. In histories of landscape architecture, landscapes at factories are given a passing mention in relation to garden cities, but they are generally associated with post Second World War industrial development.¹⁶

¹⁴ John Garner has defined the company town as ‘a settlement built and operated by a single business enterprise.’ Garner, J. S. *The Company Town: Architecture and Society in the Early Industrial Age* (New York, Oxford, 1992), p. 3. In Britain the term ‘industrial village’ is more common. See for example, Darley, G. *Villages of Vision* (London, 1975). For the more global view on company towns, see the special edition of the Italian architectural journal: Gregotti, V. (ed.) ‘Company Towns’ *Rassegna* 70:II (1997)

¹⁵ See Crawford, M. *Building the Working Man's Paradise: the Design of American Company Towns* (London, Verso, 1995), pp. 95-7

¹⁶ See Colvin, B. *Land and Landscape* (London, 1970), which includes a section on factory landscaping and Mazingo, L. A. ‘Campus, Estate and Park. Lawn Culture Comes to the Corporation’ in Wilson, C. and Groth, P. (eds.) *Everyday America. Cultural Landscape Studies after J.B. Jackson* (Berkeley, Los Angeles, London, 2003), p.255

The analysis does include the recreation parks and decorative landscaping of four company villages or towns because they either set important precedents in the concepts of factory beautification and recreation or give useful data on how recreation provision was perceived and received by workforces and the wider public. These are the Saltaire factory and village in England (1860s) where a park was made from the 1890s, the village park and recreation grounds at Port Sunlight in England (1890s), the landscaping and park at the town of Pullman in Illinois, USA (1880s) and the factory and village at Bata Town, East Tilbury, England (1930s). The case studies will be discussed further below. The next section will review the existing literature on corporate landscapes and will consider the limitations of these sources in interpreting the motivations for, the designs and the effects of corporate landscapes.

A review of published sources on corporate landscapes

This thesis has identified a corporate recreational landscape movement designed to improve working conditions and the social and cultural life at factories, to attract ‘respectable’ workers, keep them healthy, motivated and loyal and to discourage industrial unrest. With the exception of pamphlets published by the NCR and by Cadbury on their gardens and parks in 1904 and 1925 respectfully,¹⁷ and mentions of corporate landscape commissions by landscape architects in the United States,¹⁸ no books, articles or pamphlets were published specifically on factory gardens and recreation grounds until the 1930s.¹⁹ The existence of a corporate landscape movement was confirmed retrospectively by the landscape architecture profession

¹⁷ For example NCR *Art, Nature and the Factory* (Dayton, 1904); Cadbury *The Factory and Recreation* (Bournville, 1925)

¹⁸ For example Morell and Nicols, Landscape Architects *Landscape Architecture* (Minneapolis, 1911) (<http://books.google.uk>, accessed 1 June 2010)

¹⁹ ‘Factory Landscape Gardening’ *Industrial Welfare and Personnel Management*, (March 1930), 89; Walker, I.G. ‘Commercial Gardens’ *Landscape and Garden* 1:4 (Winter 1934), 47-50

when Brenda Colvin included a chapter on industrial gardens in her book *Land and Landscape* first published in 1947, and a number of articles appeared on commercial gardens in *Landscape Architecture*, the journal of the American Society of Landscape Architects, published in the 1940s and 1950s. In 1955, the industrial welfare profession also legitimised the movement when the Industrial Welfare Society (UK) published *Factory Gardens*, which gave advice to companies on the value of and requirements for recreation space at factories.²⁰

Evidence for corporate landscapes and their value in printed sources in the period of study is therefore relatively limited, but increases significantly from the 1900s in social and industrial welfare theory. The main source for the second half of the 19th century is William Morris's *A Factory as it Might Be*²¹ a utopian polemic based on his factory/workshop at Merton Abbey that produced hand-made textiles, therefore it was hardly a factory in the context of his time. His recommendation for the provision of factory gardens amongst other amenities as the route to a happy workforce, could however have been an inspiration to enlightened industrialists, many of whom were known to have read Morris and his mentor, Ruskin.

For the early 20th century, sources on factory landscapes other than company publications, are primarily books, journals and pamphlets concerning industrial welfare and recreation by welfare and medical professionals, sociologists, journalists and academics with an interest in these subjects.²² Books by Gilman, Meakin,

²⁰ Colvin, *Land and Landscape* and Lord Verulam and Youngman, G. P. *Factory Gardens* (London, 1955) These sources were published outside the period of study, but they represent a continuity of factory landscaping practice that goes back several decades and so they have been used as evidence.

²¹ Morris, W. *A Factory As It Might Be*. First published in *Justice* (April-May 1884)

²²For a comprehensive list of these sources, see Cannons, H. G. T. *Bibliography of Industrial Efficiency and Factory Management (Books, Magazine Articles etc)* (London, New York, 1920)

Tolman, Tarbell and Boettiger, and articles published in *Industrial Welfare*, the journal of the Industrial Welfare Society (IWS) have provided valuable information about specific sites and about attitudes to recreation space at factories.²³ The relative frequency with which factory gardens and recreation grounds are mentioned in these sources suggests that welfare was a motivating factor in making recreation space at factories and therefore considerable emphasis is given to analysing the role of industrial welfare in the thesis, supported by more recent histories of welfare capitalism which give a more objective view on the effects of, and attitudes to industrial welfare in the period.

Gilman, Meakin and the IWS were partial sources because they endorsed the value of recreation space at factories from the employer point of view. Dr. W.H. Tolman, a sociologist and Director of Industrial Betterment for the League of Social Service in the USA and Ida Tarbell, a ‘muck-raking’ journalist, were more objective observers.²⁴ Tolman in particular, whose final chapter presented a variety of viewpoints on the relative value of industrial welfare and recreation, prompted a closer examination of the responses of workers themselves to the ‘gift’ of landscaping and recreation grounds.

The study of the industrial landscape that is closest to my research in terms of subject matter and approach is William Littmann’s article ‘Designing Obedience: the

²³ Gilman. *A Dividend to Labor*, Meakin, *Model Factories*, Tolman, W. H. *Social Engineering* (New York, 1905); Tarbell, I. M *New Ideals in Business. An Account of their Practice and their Effects upon Men and Profits* (New York, 1916); Boettiger, L. A. *Employee Welfare Work: a Critical and Historical Study* (New York, 1923). Issues of *Industrial Welfare*, the journal of the Industrial Welfare Society (IWS) between 1919 and 1939 have been consulted in the Modern Records Centre, University of Warwick.

²⁴ Tarbell became famous for exposing the dishonest business practices of John D Rockefeller and the Standard Oil Company in Tarbell, I. M. *The History of the Standard Oil Company* (2 vols., Gloucester, MA., 1963) (First published in 1904)

Architecture and Landscape of Welfare Capitalism 1880-1930' in which he looks at how architecture and landscape design were used by two companies in North America for corporate control.²⁵ Despite Littmann's narrow focus on two case studies, the article includes useful evidence on how designed space at the factories was received by the workforce, which has assisted in developing the analysis in the final chapter of the thesis which considers the effects of the landscapes. Another study by Amanda Rees that compares the layout of Pullman in the US and Port Sunlight in the UK looks at the role of aesthetics in architecture and landscape in shaping the workforce and the brand, and has been useful to this study in that it discusses how the design of Pullman and Port Sunlight played an important but complex role in shaping behaviour and attitudes amongst the workforce, but again, the research is restricted to two companies.²⁶

An architectural history of factories that takes a broad contextual approach and has influenced the thematic approach and structure of this thesis is Gillian Darley's book *Factory*.²⁷ Darley's discussion of the gardens of model factories such as Cadbury and the Spirella corset factory at Letchworth Garden City was the fillip for the discovery of an under-explored subject. In her second chapter, Darley acknowledges the significance of the gardens of the late 19th century model factories such as Cadbury and Port Sunlight, but she does not explore their influence across Europe and America. Like most architectural historians, Darley concentrates on describing the effect of the architectural language and does not analyse the relationship between landscape and building. In her analysis of the Hoover Factory at Perivale, near

²⁵ *International Labor and Working Class History* 53 (Spring 1998), 88-114

²⁶ Rees, A. 'Nineteenth Century Planned Industrial Communities and the Role of Aesthetics in Spatial Practices: Beaux Arts Pullman and Arts and Crafts Port Sunlight' (*Journal of Cultural Geography*, forthcoming, 2011)

²⁷ Darley, *Factory*

London, for example she discusses the impact of the building on the passing motorist using recent photographs to illustrate her points, but forgets to mention that the white masses and colourful details of the building was originally set off by green lawns and abundant flower beds, a deliberate obfuscation to the utility of their purpose that contributed to shaping corporate identity and advertising.

No other architectural histories or surveys of factories in this period have the breadth and scope of Darley's book, and they tend to provide very limited information on factory landscaping or on the relationship between factory buildings and the social and cultural life of a factory and nor do they explicitly acknowledge the significance of factory gardens and recreation grounds.²⁸ A number of studies analyse the effects of social and technological change on the architecture and culture of factories in America including Lindy Biggs' *The Rational Factory*²⁹ and Betsy Hunter Bradley's *The Industrial Architecture of the United States*³⁰ but these sources do not discuss the factory gardens and recreation grounds in any detail. This thesis is based on the premise that built space cannot be fully understood without the inclusion of the context of its landscape, a position pioneered by architect and social anthropologist, Jan Birksted, and architectural historian and geographer Christine Macy and Sarah Bonnemaïson, but still eschewed by many writers on architecture.³¹ Therefore analyses of industrial planning, particularly those that discuss the relationship

²⁸ A partial exception is Jones, E. *Industrial Architecture in Britain 1750-1939* (London, 1985)

²⁹ Biggs, L. *The Rational Factory. Architecture, Technology and Work in the Age of America's Mass Production* (Baltimore, London, 1996)

³⁰ (New York, Oxford, 1999)

³¹ Birksted, J. *Relating Architecture to Landscape* (London, 1999) and Macy, C. and Bonnemaïson, S. *Architecture and Nature. Creating the American Landscape* (London, New York, 2003), p. 8. Birksted's teaching of architecture is based on the premise that architecture and landscape are disciplines with distinctive processes, which reveal specific ways of understanding place and plan. He argues that landscape casts architectural history and theory in a new light. See also Worpole, K *The Value of Architecture: Design, Economy and the Architectural Imagination* (London, 2000)

between designed space and theories of social control, have been more important than architectural histories in shaping the approach of this study.³²

Most of the case studies that inform this analysis, such as Cadbury, Lever Brothers, Rowntree, Pullman, the National Cash Register Company and Spirella, have been researched and published as studies of individual sites or discussed within studies of industrial philanthropy³³ or within histories of the garden city movement. A company case study that has been useful to this research is a PhD thesis from Yale University of 1993, which is an analysis of the visual culture of the Cadbury factory and Bournville Village and includes a chapter on the Girls' Recreation Ground at the factory.³⁴ While the author gives a fascinating insight into the Cadbury's promotion of architecture, gardening and the arts and crafts, a lack of contextual research weakens his argument about attitudes to gardening in Britain in the late 19th century, which he describes as a 'moribund activity'.³⁵ The forthcoming analysis in Chapters 1 and 2 will show that, on the contrary, gardening and other outdoor activities became increasingly popular across the classes into the twentieth century and firms continued to exploit national passions for green spaces after the Second World War.

For the contextual framework for the 20th century case studies, the most fruitful secondary sources have been studies of the garden cities and suburbs written from a variety of perspectives by planning and urban historians, sociologists and

³² See Bucci, F. 'Territories of Surveillance' in Gregotti, 'Company Towns'

³³ Some examples are; Smith, C., Child, J. and Rowlinson, M. *Re-Shaping Work: The Cadbury Experience* (Cambridge, 1990); Buder, S. *Pullman: an Experiment in Industrial Order and Community Planning 1880-1939* (New York, Oxford, 1967); Gater, S. and Vincent, D. *Factory in a Garden: Wedgwood from Etruria to Barlaston, the Transitional Years* (Keele, 1988)

³⁴ Hoffman, J. M. 'Imaging the Industrial Village: Architecture, Art, and Visual Culture in the Garden Community of Bournville, England' (Yale Univ. PhD thesis, 1993)

³⁵ Ibid. p. 768

geographers, many of whom discuss the industrial areas and some the individual factories.³⁶ The most useful accounts for this research have been contemporary ones. C. P. Purdom's book on satellite towns includes interviews with industrialists who established factories there.³⁷ However, writers on garden cities have tended to focus on the architecture and planning aspects of the subject and they tend to assume that landscapes and gardens are made for food production, health, respectability and the creation of a rural idyll, driven by Ruskinian ideals.³⁸ A more dialectical approach to gardens from the planning point of view has recently been published by landscape historian Laura Lawson in her article and subsequent book which studies the relationship between planners and community gardening in America in which she cites multiple reasons - social, political, economic and psychological – for the making of gardens.³⁹ Lawson's research is informed by more recent studies of garden and landscape history.

By finding links between firms on their policies and practices of landscaping and provision of recreation, this study seeks to examine the relationship between English and American attitudes and to examine the dialogue between them. This relationship has of course been thoroughly recorded in architectural, design and planning histories,⁴⁰ but our understanding of the connections between Britain and the USA in

³⁶ Buder, S. *Visionaries and Planners: The Garden City Movement and the Modern Community* (New York, Oxford, 1990)

³⁷ Purdom, C.B. *The Building of Satellite Towns: a Contribution to the Study of Town Development and Regional Planning* (London, 1949)

³⁸ Lang, M. H. *Designing Utopia. John Ruskin's Urban Vision for Britain and America* (Montreal, New York and London, 1999). An exception is: Way, T. 'Designing Garden City Landscapes: Works by Marjorie L. Sewell Cautley, 1922-1937' *Studies in the History of Gardens and Designed Landscapes* 25:4 (2005), 297-316. Thaisa Way analyses garden city landscape designs from the perspective of the landscape architect.

³⁹ 'The Planner in the Garden: a historical view into the relationship between planning and community gardens' *Journal of Planning History* 3:2 (2004), 151-176 and *City Bountiful: a Century of Community Gardening in America* (Berkeley, Los Angeles, London, 2005)

⁴⁰ For example see Rodgers, *Atlantic Crossings*

landscape theory and practice is still limited.⁴¹ Walter L. Creese includes a chapter on Bournville and Port Sunlight in his book on garden cities, in which he demonstrates the importance of British parks and the Cadbury and Lever initiatives to American attitudes to garden-making. But it was a dialogue that was far from one way, he argues, since Ebenezer Howard borrowed heavily from Edward Bellamy who was also an acknowledged source of Morris' utopian ideals of garden making.⁴² Using empirical evidence, this study builds on our knowledge of the cross-fertilisation of ideas on industrial welfare and industrial planning across the Atlantic, particularly in how recreational landscapes were used for promotional purposes. The research indicates that following visits by British industrialists to North American sites, the British became more strategic in using the corporate image for branding, advertising and public relations.

The above sources have provided evidence to suggest that corporate recreational landscapes developed in this period and that welfare and other professional regarded them as beneficial to industrial welfare and civic improvement. However, they do not explain the complexities of these spaces in terms of the motivational power of landscaping, how and why they were used and their effects on employees. The next sections discuss how theoretical perspectives on space and power combined with empirical research and interdisciplinary research has assisted in answering these questions.

⁴¹ An exception is Jessup, K. L. 'The New England Domestic Landscape of 1876 to 1917, and the Influence of the British Idyll' (De Montfort Univ. PhD thesis, 2005)

⁴² Creese, W.L. *The Search for Environment. The Garden City: Before and After* (New Haven and London, 1966)

Theoretical perspectives

Gardens and recreation grounds are designed objects and spaces and design is concerned with practices and processes that necessarily interlink; in the words of John A. Walker, from his book, *Design History and the History of Design*:

Design...occurs at the intersection or mediation between different spheres, that is between art and industry, creativity and commerce, manufacturers and consumers. It is concerned with style and utility, material artefacts and human desires, the realms of the ideological, the political and the economic.⁴³

This study will analyse factory landscapes as designed artefacts - the ideologies and values that shaped their design and making, and how they were used and received.

The analysis will also consider how the landscapes were mediated through photographs, illustrations, film and texts reproduced in guidebooks, postcards and the press. This study is therefore a history of the object and the image, not a chronological history, but one that draws out a different theme in each chapter. The methodology is strongly empirical but with a theoretical underpinning that takes an interdisciplinary contextual and methodological approach to the object of study borrowing theories and methods from the disciplines of cultural and historical geography, social science, social history, philosophy and the histories and theories of art, design and photography. Sources that look at specific approaches and typologies have also been consulted including social and economic histories of industrialisation, urbanisation and the rise of professionalism; architectural and social histories of factories and company towns; the history of management systems, specifically welfare capitalism; sports history; the history of leisure and recreation; women's history and utopian studies.

⁴³ (London, Pluto Press, 1989), p. ix

These histories confirm that the provision of recreational space at factories was part of a policy of social engineering and control. Theories of social control have been of particular interest to historians who have used Marxist social theory to analyse the role of hegemonic power in industrial society. While this theoretical approach has been taken into account in this study and its usefulness acknowledged, it is too simplistic to use it as the sole interpretative device because social structures and motivations are too complex to categorise solely in terms of power structures in society. The social control theory does not allow for altruism or the motivations of religious faith; or the theory also tends to suggest that altruism and religion are always motivated by self-interest and a desire to control. But people's motivations are not clear-cut and a dependence on one political or social theory tends to stereotype the social classes.⁴⁴ Victorian and Edwardian society was full of contradictions⁴⁵ and although self-interest will emerge as the motivating factor in the provision of recreation grounds it was often an enlightened industrialist who made the best facilities and who also performed numerous acts of public duty as part of social reform. Whether motivated by self-interest or not, altruism and religion were often catalysts to social reform and thus to improving the lives of the less privileged.

The methodology of this thesis has been influenced by David Matless' book *Landscape and Englishness*.⁴⁶ In his cultural history of the English landscape in the first half of the 20th century, Matless emphasises the importance of empirical evidence

⁴⁴ See Peter Bailey's introduction to the new edition of his book *Leisure and Class in Victorian England. Rational Recreation and the Context for Control 1830-1885* (London, 1987) in which he responds to criticism of using the social control model to explain class domination, that leisure was an arena of class struggle. His critics had argued that he stereotyped the classes. He counters the criticism by pointing out that his research shows how the workers contested attempts at control and argues that his evidence in fact counters the social control model.

⁴⁵ Harris, *Private Lives*, 251

⁴⁶ (London, 1998)

such as photographs, advertising images, travel guides and films in explaining how the meanings of the landscape changed and were mythologised in the period of 'modern Englishness'.⁴⁷ Matless outlines in his introduction some of the theory from philosophy and cultural studies that has shaped his analysis of historical change, but he points out that his book is permeated by theoretical material rather than explicitly defined by theory.⁴⁸ This study takes the same approach. Its structure and approaches are informed by theories that will be outlined here and revisited in the conclusion, but the main discussion will interrogate the empirical evidence in the light of themes that have been defined and developed by theory.

The subject of this thesis is the impact of industry on the landscape in the modernising industrial world.⁴⁹ In landscaping their factories, industrialists were attempting to mitigate the effects of industrialisation and to create ideal open space within a structure of corporate power that reflected a modern industrial and social outlook. Therefore to analyse the motives for making these landscapes and the effects on the workforce and on the reputation of industry, it is necessary to examine theories that elucidate the organisation of space and place in the context of factory landscapes and the power relations that operate within these spaces.

A useful starting point has been to look at the idea of utopian space or the organisation of space in an ideal world and society. Industrialists making gardens were attempting to create ideal working conditions thus releasing their factories from

⁴⁷ Ibid., p. 16

⁴⁸ Ibid., p. 21

⁴⁹ I avoid the word 'Modernism' here due to its ambiguity and because it is normally applied to movements in art, design, architecture and literature in the first three decades of the 20th century. While this thesis concerns the design of landscape, the case studies were not 'Modernist' in style, although they were created in the same conditions of social reform, which shaped much modernist design. See Wilk, C. (ed.) *Modernism. Designing a New World* (London, 2006), pp. 13-21

connotations of exploitation. However, Burrell and Dale, citing Lefebvre have argued that for most utopianists, utopia is an organised space and the garden or landscape contributes to social order, or in Lefebvre's words, a 'closed authoritarianism.'⁵⁰ H.G. Wells understood this in 1905 when he pointed out in *A Modern Utopia*, that in almost all utopias, gardens have been imagined as formal, as 'symmetrical and perfect cultivations' and that these controlled communal spaces discourage individuality and personal expression.⁵¹ It is no coincidence that two important texts were published close to the start of this period of study that imagined utopias, one in Britain and one in the USA, Edward Bellamy's *Looking Backward* (1888) and William Morris' *News from Nowhere* (1890). In both books, the organisation of garden and park space is representative of systems of social organisation. In Morris' *England of 2002*, informal garden space and imagery suggested a release of capitalist economic and political control and the collapse of the industrial system of mass production. In Bellamy's *Boston in the year 2000*, the formal tree-lined boulevards of Boston and the fountains that played in the public squares were symbolic of Bellamy's highly regulated and almost crime-free communist society. A comparison of the landscape types in these texts emphasises the paradoxical nature of gardens and parks with their connotations of both freedom and control and this idea will be explored further in the thesis with the assistance of perspectives from a number of disciplines.

The most critical and analytical landscape and garden history writing to date has been informed by approaches to landscape developed by historical and cultural geographers which in turn has been informed by post-structuralist critical theory. Geographers

⁵⁰ Lefebvre, H. *The Production of Space* (Oxford, 1991) in Burrell, G. and Dale, K. 'Utopiary: Utopias, Gardens and Organisation' in Parker, M. (ed.) *Utopia and Organization* (Oxford, 2002), pp. 106-127. Burrell and Dale borrow Lefebvre's quote from Harvey, D. *Spaces of Hope* (Edinburgh, 2000), p. 182

⁵¹ Wells, H.G. *A Modern Utopia* (London, 1952), p. 317; p. 130

such as Stephen Daniels, Denis Cosgrove, David Harvey, David Matless and Richard Schein have pioneered studies of the interrelations between humans and the designed landscape, how environment can be manipulated to shape specific identities and behaviour and how different social groups respond to environments.⁵² This approach has been helpful in suggesting how to ‘read’ landscape and gardens as texts to draw out interpretations of the multi-faceted social, cultural and political messages projected by and through these spaces, how they are received by the users and how meanings have changed over time.⁵³ Landscape theorists who read landscape as texts have drawn out the symbolic and ideological aspects of landscape – how space is organised according to changing ideas and human social and cultural relations and how landscape and the memory or nostalgia for landscape has the ability to move us or even to redeem us.⁵⁴ As Jan Birksted expressed it in *Landscapes of Memory and Experience*: ‘...transporting the past into the present, recreating the present as past.’⁵⁵

The multiple layers of ambiguous meanings in designed landscapes make them highly expressive of human relations and of personal and collective identity. As J.B. Jackson pointed out in *The Necessity of Ruins and other Topics*, ‘...the significance of space in landscape terms ...is that it makes the social order visible. Space, even a small plot

⁵² See Cosgrove, D. *Social Formation and Symbolic Landscape* (London, 1984); Cosgrove, D. and Daniels, S. (eds.) *The Iconography of Landscape* (Cambridge, 1988); Harvey D. *Spaces of Hope* (Los Angeles, London, 2000); Wilson and Groth, *Everyday America*

⁵³ For example Mitchell, W.J.T. *Landscape and Power* (Chicago, 1995); Dixon Hunt, J. *Greater Perfections. The Practice of Garden Theory* (London, 2000); Wrede, S. and Adams W.H. *Denatured Visions. Landscape and Culture in the Twentieth Century* (New York, 1991); Treib, M. *Settings and Stray Paths: Writings on Landscapes and Gardens* (London and New York, 2005); Andrews, M. *Landscape and Western Art* (Oxford, 1999)

⁵⁴ See Harwood, E., Williamson, T., Leslie, M. and Dixon-Hunt, J. ‘Whither Garden History?’ *Studies in the History of Gardens and Designed Landscapes* 27:2 (April-June 2007), 91-112 and Corner, J. (ed.) *Recovering Landscape: Essays in Contemporary Landscape Architecture* (New York, 1999)

⁵⁵ Birksted, J. *Landscape of Memory and Experience* (London, 2000), p. 3

of ground, identifies the occupant and gives him status and most important of all it establishes lasting relationships.’⁵⁶

Borrowing these ideas, this research on factory gardens dissects the values contained within the factory gardens, from the personal values and motives of the individuals who made them to the wider values and needs of the industrial society for whom they were made. By studying the use of the gardens and recreation grounds, who controls their use and how those who use them become part of a company’s promotional strategy, it is possible to make more objective judgments about their value from the perspective of users as well as providers, and these two perspectives do not necessarily always coincide.

The factory gardens and recreation grounds remained under the jurisdiction of factory regulations and the rules of the sports and social clubs, and they were therefore subject to the power structures of the factory at all levels, from ‘top down’ and from ‘bottom up’. All landscape is, in the words of W.J.T. Mitchell, ‘an instrument of cultural power’ and in his book *Landscape and Power* he identifies how power relations work in the construction and use of the landscape by asking ‘not just what landscape “is” or “means” but what it *does*’.⁵⁷ These power relations suggested in landscape are not one-sided, he argues, the power of the dominant classes over the dominated, but by looking at those who see or use the landscapes, it becomes clear that the landscapes have the potential to enhance the power of the dominated. To explore the power relationships between management and employees in their attitudes

⁵⁶ Jackson, J.B. *The Necessity for Ruins and Other Topics* (Amherst, 1980), p. 115. Jackson acknowledges Yi-Fu Tuan as the source of this idea. Tuan, Y. *Space and Place* (London, 1977)

⁵⁷ Mitchell, *Landscape*, 1

to and uses of the gardens and recreation grounds, it has been necessary to delve further into philosophies and sociologies of power.

No study of factories can ignore Michel Foucault's highly influential model of the Panopticon as a physical representation of the way that power operates in society. Borrowing from Jeremy Bentham's prison system of the Panopticon, Foucault argued in *Discipline and Punish* that modern structures of power and social control are managed not by coercion but by surveillance and that power within factories, as well as schools, hospitals and other institutions operates in the same way.⁵⁸ In this and in his other discourses on power, Foucault argued that it is the 'hidden', non-coercive impositions of power that are 'dressed up' as social norms, that render people accepting of power and susceptible to its effects.⁵⁹

Foucault's theories can help to explain how the ideologies of factory gardens and recreation grounds were 'sold' to the workforce and to the public, and were largely accepted as positive. But they are unsatisfactory in that the power relations and structures found in the use and management of the gardens and recreation grounds are much more complex than Foucault's theories would suggest, because they do not explain any resistances to the industrial space (activities that took place in the gardens, were not subject to the levels of surveillance as those inside the factory) or how and why some workers gained power through the ways that these spaces were managed and used. Therefore it has been necessary to consult additional theories of power that explore power within social space in order to suggest that outdoor spaces

⁵⁸ Foucault, M. *Discipline and Punish. The Birth of the Prison* (London, 1991), pp. 200 - 228

⁵⁹ See Lukes, S. *Power. A Radical View* 2nd revised edn. (Basingstoke, 2005), p. 91

such as gardens and recreation grounds might offer more physical and metaphorical 'breathing space' for workers who are subject to power and control at work.

Henri Lefebvre argues that although the production of space is a means of control in a capitalist system, the space that he calls 'social space' has no boundaries, but represents the practices of all societies. Space, says Lefebvre, is present in all the intersections of social, economic and political life. Resistance to Foucault's collusion of knowledge and power is possible if individuals and groups generate or produce spaces to constitute and legitimise themselves.⁶⁰ These ideas have been helpful in analysing the effects of the gardens and the extent to which the workforce 'sees through' the spaces that are made for them and also in the ways in which some employees appropriated the spaces for their own needs.

The sociologist Steven Lukes is more overtly critical of Foucault. In the extended edition of his book *Power. A Radical View*, first published in 1974, Lukes argues strongly against Foucault's kind of power that he calls a 'power of seduction', or the use of power to 'secure willing compliance'.⁶¹ Lukes argues that even within situations where individuals are subject to control, sometimes they comply with control and sometimes they do not, and in any case, it should be recognised that some cultural ideals introduced by powerful individuals are a force for good. Individuals, he argues, have 'multiple and conflicting interests' that are not necessarily dictated by class or experience. Their responses to power will vary and will often depend on their personal pursuit of happiness and survival.⁶² The theories of Lefebvre and Lukes have therefore informed this exploration of the gardens and recreation grounds from a

⁶⁰ Lefebvre, H. *The Production of Space* (Oxford, 2007), p. 416

⁶¹ Lukes, *Power*, 98, 106

⁶² *Ibid.*, 145-150

number of dimensions to judge the spaces between them – a range of motivations for making them and responses to them that are not straightforward or consistent. To regard them as part of a power struggle between capitalists and workers is far too simplistic.

Empirical methodologies: primary research and case studies

The contextual and theoretical perspectives discussed above have assisted in building a framework within which the empirical evidence has been organised and examined and in maintaining an objective view. However, these sources do not give comprehensive information on the designs of the corporate landscapes, how they were used, how they were mediated, or why and how they changed over time. This information was obtained by empirical research in company archives and in museums, using the original landscape plans, photographs and illustrations, minute books, company magazines, leaflets and other promotional materials. Information from the archives on the workforce's point of view is limited and possibly biased, therefore a small amount of oral history has been collected to gain insight into employees' opinions of the landscapes, but only to a limited degree since it has been difficult to find willing respondents who worked before the War, now in their 80s or 90s. This kind of evidence has, however, been found in secondary sources, collected by scholars working in the 1990s who had easier access to respondents employed before the Second World War.

The major case studies are the gardens, parks and recreation grounds of the two companies mentioned above, Cadbury at Bournville, UK, the National Cash Register Company at Dayton, Ohio (NCR); the Spirella Corset company in Niagara Falls, USA

and Ontario, and in Letchworth Garden City, UK; the Natural Food Company (Shredded Wheat after 1913) in Niagara Falls, USA and the Shredded Wheat Company in Welwyn Garden City, UK. Maps of these case studies giving precise locations are presented in Vol. 11. **[Figs 0.1 – 0.8]**

The most substantial evidence comes from the archives of Cadbury and the NCR for good reasons. Both companies were innovators in ideas and designs for factory landscapes. The gardens, parks and recreation grounds of both Cadbury and the NCR are discussed in all the contemporary sources on factory welfare and recreation. These companies have extensive and rich archives of printed material (including the company magazines), unpublished documents, photographs, film and other ephemera, although these have had to be used with care as they do not provide an impartial view. They are also useful in this comparative study of English and US examples because the companies had a close relationship. They exchanged visits and borrowed ideas on worker welfare and factory systems from each other.

The Shredded Wheat and Spirella companies are major case studies because they were US firms that established plants in England and so the landscaping of their English and American factories can be compared. In the case of Spirella, no evidence has been found for the landscaping of the firm's factory in Niagara Falls, New York, therefore the sister factory across the river in Niagara, Ontario, has been discussed. These companies also illustrate the link between the planning of Garden Cities in England and the making of corporate landscapes.

Archival research has also been conducted for a number of other case studies, which represent different time periods in the period of study and which present evidence to show the variations in the designs of factory landscapes and to support the evaluations of their effects on the workforce and on the local community. The archives of Pullman, Illinois, USA were researched because this landscape was constructed close to the start of the period of study and it was representative of a landscape that failed to contribute to successful employee relations. The archives of the Rowntree factory in York revealed a development of landscapes that paralleled those at Cadbury and they confirm attitudes of Quaker companies to their female employees. The Ovaltine factory at King's Langley, UK and the Bata Factory, East Tilbury, UK were included as examples of landscapes made in the 1920s and 1930s respectively. The Bata factory and village were constructed close to the end of the period of study and are an indication of the impact of modernism on the industrial landscape. For landscaping constructed between the Wars in the US, landscape plans for the Kohler factory in Wisconsin, and the Western Electric factory in Baltimore, Maryland were studied in the archive of the Frederick Law Olmsted Historic Site in Boston, MA. Details of these can be found in Appendix 2.

The archives of companies in Nottingham, England have also been consulted; the Boots Company, Raleigh Cycles and the John Player Cigarettes. These highly successful Nottingham companies provide evidence with which to test the value of gardens to companies, because they did not provide gardens or parks and only Raleigh used planting to a limited extent to embellish their new office block in the 1930s. All three companies did however have extensive sports grounds.

One of the problems of this particular research and of the history of landscapes in general, is a lack of physical evidence. The Cadbury factory is the only site where the gardens and parks are relatively intact. The gardens at the Spirella Corset factory at Letchworth Garden City also exist in a similar form to the original following a recent re-planting, but evidence for the landscapes of their factories at Niagara Falls is limited. Similarly challenging has been finding evidence for the planning and making of the gardens, because where in some cases the plans of the factories have survived, the designs for the landscapes and gardens, with a few exceptions, have not. However, the relevant garden plans have been located for the two major case studies and these have been essential in understanding the evolution of ideas for the gardens and in their interpretation.⁶³ A different view has been obtained from the press and in many cases press cuttings of visits to the factory give valuable insights into their design and purpose. These have to be analysed with care as the journalists were often 'courted' by the company.

National and local library archives have also been used extensively for research as have a number of specialist archives. These include archives at the Library of Congress and the Olmsted archive mentioned above for information about the Olmsted firm; the Chicago Public Library and the Newberry Library in Chicago, Massachusetts for material on the Pullman Company; and the Industrial Welfare Society archive at the University of Warwick, UK.

For all the case studies, the company magazine, guide books, advertisements, postcards and photographic collections have been important sources of evidence for

⁶³ The plans of the Cadbury grounds are at the factory in Bournville and those of the NCR are in the archive of the Olmsted Historic Site, Boston, Massachusetts.

the designs of the gardens and parks how they were used, but it is acknowledged that these are partial. To address the particular problems of promotional image-based evidence, the corporate images have been analysed in a separate chapter, Chapter 7, using theories and methodologies that are specific to image analysis. These will be discussed further in that chapter.

Developing the argument using multidisciplinary sources

The discussion has so far surveyed the available literature on corporate landscapes, outlined the theoretical perspectives, and explained how the empirical research has provided evidence for the production, design and mediation of the landscapes.

However, these sources do not explain the extent to which the landscapes contributed to business success and to the quality of life of the workforce. Nor do they explain how the landscapes added to the quality of the industrial landscape and to the impact of the landscapes in a modernising industrial world. This final section will outline the arguments and the structure of the thesis to confirm how an interdisciplinary approach has contributed to the originality of the conclusions on the value of landscaping in an industrial context.

Chapter 1 contextualises the subject of corporate recreational landscapes within industrial welfare theories and practices using the primary and secondary sources on industrial welfare discussed above. It argues that by the 1920s, industrial welfare was no longer seen as paternalistic, but as an essential strategy to a modern industrial outlook. Chapter 2 develops the links between corporate landscapes, environmental and social reform and civic improvement. Using social and architectural histories, histories of Garden Cities, the City Beautiful Movement, the public park movement

and primary evidence from the case studies and from the Industrial Welfare Society, the chapter evaluates the environmental and social benefits of factory landscapes.

Having established the contexts and introduced the case studies, Chapter 3 addresses the pivotal argument of the thesis which is why and how the landscapes added value to companies. Using philosophy and social, anthropological and psychological approaches to understanding the value of gardens and parks, the analysis shows that companies exploited the design, aesthetic and space of gardens as a powerful cultural metaphor for social engineering to shape morality, increase productivity and improve the company image. The analysis of the meaning of gardens borrows from the philosophical method that has recently been applied to gardens through the publication of David Cooper's *A Philosophy of Gardens*, which he claims to be the first time such an interpretation has been attempted.⁶⁴ Using studies that have taken psychological, sociological and anthropological approaches to gardens, the thesis suggests that the making of the factory garden as a form of social engineering challenges Cooper's conclusion as to the value of gardens.⁶⁵

Chapters 4 and 5 develop the analysis of the value of the recreational landscapes, showing how they were conceived, designed and managed with particular activities in mind and how they changed over time. Using histories and theories of leisure and of

⁶⁴ Cooper, D. *A Philosophy of Gardens* (Oxford, 2006). Ross, S. S. *What Gardens Mean* (Chicago, London, 1988) is a philosophic approach to gardens but she looks at gardens largely in relation to art and focuses on the 18th century to the present.

⁶⁵For example Francis, M. and. Hester Jr. R. T. (eds.) *The Meaning of Gardens* (Cambridge, MA, London, 1990); Preston, R. 'Little English landscapes: developing suburban gardens between the wars' *Things, a Journal of Material Culture* 2 (Summer 1995), 69-85 and she is working on a book *The English Villa Garden: Design and Culture in the Suburban Landscape, 1815-1914.*; and Le Bas, E. 'The Making of a Socialist Arcadia: Arboriculture and Horticulture in the London Borough of Bermondsey after the Great War' *Garden History* 27:2 (Winter 1999), 219-37. Le Bas is currently researching the design of open public spaces in the early 20th century; and Bhatti, M. et al "I love being in the garden." Enchanting Encounters in Everyday Life' *Social and Cultural Geography* 10:1 (2009), 61-76

popular culture, the discussion in Chapter 4 argues that the industrialists promoted 'rational recreation' in the grounds, forms of recreation that were considered to be respectable and educational. Texts that explore these issues from class, gender and childhood perspectives have assisted in explaining why industrialists tried to influence their workforces with the 'right' kind of recreation, why activities for men and women tended to be gender specific and why children took compulsory exercise and were encouraged to learn gardening.

Chapter 5 examines the designs of company recreation parks in the early 20th century and argues that they were conceived and designed according to developing theories of the value of sports and recreation. Using sports histories and histories of parks and recreation grounds, and comparing these with evidence from the cases studies, the analysis shows that outdoor recreation was common at larger factories and that at some plants, particularly in the United States, corporate recreation was superior to municipal provision and even contributed to the sporting 'revolution' of the period.

Chapter 6 examines how the professional expertise of landscape architects added value to the company recreation parks and compares the different cultural, symbolic and stylistic design approaches of those who designed the landscapes of the main case studies, Cadbury and the NCR. The comparative analysis is linked to sources from landscape theory and history to explain how these companies expressed national identities in their different approaches to the suburban industrial landscape.⁶⁶ The

⁶⁶ Architectural, social and cultural histories of British suburbia have mostly focussed on planning and housing and the suburban factory is conspicuously absent, perhaps because it is assumed that suburban dwellers commuted to work. Unlike British writers, the Americans have taken for granted the integral nature of industry and housing in the suburbs, perhaps due to their interdependence at an earlier period than in Britain. See Stilgoe, J. R. *Borderland: the Origins of the American Suburb 1820-1939* (New Haven, 1988); Fishman, R. *Bourgeois Utopias: the Rise and Fall of Suburbia* (New York, 1987);

chapter argues that the expressions of national identity that are rooted in the landscape history of the two nations, add value to the symbolic meaning of the suburban industrial landscape. It is intended that this study, alongside the current reappraisal of the role of gardens and gardening in the suburbs will contribute to our understanding of suburbia, one that will add the dimension of industry to the suburban landscape.

Chapter 7 approaches the subject of study largely from image, as opposed to textual analysis and this chapter is pivotal in developing the conclusion of the thesis which argues that ultimately it was the image of the gardens, not their effects on employees that were their lasting legacy. The discussion uses marketing and advertising history and theory, photography theory, women's history and histories of childhood to study the publicity images of the case studies and their methods of branding and promotion. The analysis reveals that companies used photographs, illustrations and films of the landscapes and factory tours to construct myths about factories and factory labour and to idealise working conditions. The analysis also shows that the photographs reinforce the gardens as gendered, but that they also more subliminally illustrate power relations in the factories. .

Chapter 8 re-evaluates the benefits of the gardens outlined in Chapters 1 and 2 by examining the primary and secondary evidence from employers, employees and interested professionals. This evidence is supplemented by a limited amount of oral history and by conclusions of two studies of industrial welfare in US companies by William Littmann and Nikki Mandell. The analysis finally assesses the relative

Fishman, R. *Urban Utopias in the 20th Century: Ebenezer Howard, Frank Lloyd Wright, Le Corbusier* (New York, 1977); Jackson, *Crabgrass Frontier*, and Creese, W. 'Imagination in the Suburb' in Knoepfelmacher, U.C. and Tennyson, B. *Nature and the Victorian Imagination* (Berkeley, Los Angeles and London, 1977)

values of corporate recreational landscapes to employee welfare and job satisfaction to corporate identity and public relations to consider which is the greater.

In summary, the development of the argument of the thesis using multi-disciplinary sources contributes to a series of original conclusions on the relationship between industry and landscaping in the period of study. The thesis demonstrates that the organisation of outdoor space at factories and the power relations that operated in these spaces were representative of a modern approach to industrial landscaping, that resolves the apparent oppositions and ambiguities of the urban industrial and the rural landscape; the machine and the garden.

Chapter 1: From Model Factory to Modern Factory

The 'Factory Gate' films of the popular film company Mitchell and Kenyon, showing men, women and children streaming in and out of industrial works in the north of England at the turn of the 19th century are a potent reminder that most factory landscapes tended to be ad hoc accumulations of undistinguished buildings with little or no attention given to landscape aesthetics.¹ However, as industrialists re-located from urban centres, or built new factories in the suburbs, it became increasingly common for factory buildings to be attractively landscaped and for recreation grounds to be created at larger plants.² Many industrialists, sociologists and other welfare professionals, architects, landscape architects and engineers believed that landscaping contributed to the creation of efficient, productive and respectable institutions, well regarded by consumers and where workers would be motivated, even proud to work.

The emergence of factories with gardens and recreation grounds developed in the climate of social and economic reform that swept through the industrialised world from the second half of the 19th century to improve the living and working conditions of the working classes. Environmental reforms included the making of parks and other green spaces in towns and cities followed by attempts to improve urban planning. The provision of green space at factories must be understood in the context of environmental reform, but this will be discussed in later chapters. This chapter will focus on the reforms at the factories themselves that provide the context for the idea of factory gardens and recreation grounds. Broadly, reforms focussed on the welfare

¹ For example the film Mitchell and Kenyon 28 'Employees of Messrs Lumb and Co. Leaving the Works, Huddersfield' (1900). *Electric Edwardians: The Films of Mitchell and Kenyon. Wool Factory Gate*. (BFI National Archive DVD, 2005) This genre of film which came with captive audiences willing to pay to see themselves on camera, originated in the Lumière Brothers' factory exit films made at Lyons in the 1890s.

² As industry was electrified from the late 19th century, industrialists had a greater choice of location and more space for development.

of industrial workers, which included working hours and conditions, wages and pensions, but also made better provision for education, health and recreation at work. Factories where the welfare of workers was paramount became known as model factories and many of these were architecturally significant. Model factories varied in the level or type of welfare provided (for example at some well-built factories with good amenities, wages were relatively low), and not all factories regarded as model were landscaped. However, the factories that had significant landscaped gardens and good recreation provision, including playgrounds and/or allotment gardens for children, became some of the most celebrated of the model factories.

No history of the model factory has yet been written and this chapter does not seek to write that history, but to draw out a variety of definitions of the type, how and why it was defined by 1900, and how the idea of the model factory was absorbed into the discourses on industrial architecture and management systems which developed after approximately 1890. The discussion will show how these conditions became more clearly identified and theorised by management, welfare and building professionals, broadly under the theory and practice of ‘welfare capitalism’, or the making of profit not at the expense of, but to the benefit of, the workforce. The analysis will show how, by the early 20th century, factories with good welfare provision were increasingly defined not as ‘model’ but as ‘modern’, or both. With an understanding of the changing theories and practices of industrial welfare, it is possible to understand the conditions in which the idea of factory gardens and recreation grounds emerged and the extent to which they were regarded as a constituent part of a model factory.

This research has focussed largely on those elements of welfare that are relevant to landscaping, namely the design of the buildings and the plan of the site and the provision of outdoor recreational amenities. The research only touches on workers' wages where relevant, and has omitted entirely issues surrounding production, for example the design of the building in relation to the machinery and other issues like health and safety on the factory floor.

Primary sources on the model factory and the modern factory

Although the idea of the model factory had its roots in the 18th century and paralleled that of the model company village or town, the type became fully defined by the turn of the 19th century, when a significant number of industrialists not building company towns had developed innovative and extensive welfare schemes that included recreational amenities, including the Cadbury Brothers at Bournville and John Patterson at the National Cash Register Company (NCR), companies which have been described as the zenith of their kind.³ By 1905, a number of books and articles had appeared on factory management and welfare, which identified and compared factories across Europe and America in relation to their design and conditions of work, pay and other benefits.

An early account of a model factory was by William Morris (*A Factory as it Might Be*, 1884), who described ideal welfare conditions based on his factory/workshop at Merton Abbey, where he provided a wholesome environment, including a garden and

³ Bryson and Lowe have argued that Bournville was not a company town, because residency was not restricted to factory employees and less than half the Cadbury workforce lived in Bournville. Bryson, J.R. and Lowe, P.A. 'Bournville: A Hundred Years of Social Housing in a Model Village' in Gerard, A.J. and Slater, T.R. *Managing a Conurbation. Birmingham and its Region* (Studley, 1996)

educational opportunities for his workmen and boys.⁴ Subsequent writers sought to promote the idea of a model factory and show the extent to which model factories now existed in the industrialised world, including N.P. Gilman in *A Dividend to Labor: a Study of Employer's Welfare Institutions*, published in New York in 1899, Budgett Meakin in *Model Factories and Villages*, published in London in 1905 (which appears to have plagiarised much of Gilman's book) and in Ida M Tarbell's *New Ideals in Business. An Account of their Practice and their Effects upon Men and Profits* published in New York in 1916. A more balanced and professional approach, *Social Engineering*, by social scientist William Tolman, appeared in 1909. In the last chapter of his book, Tolman evaluated welfare work in factories and included examples of those companies that did not consider it to be either popular or cost effective.

By 1914, 'Model' with its connotations of paternalism, had turned to 'Modern' as welfare and other industrial management systems were professionalized and driven by legislation on minimum standards at work. At the same time, as the language and status of modernism took hold, the 'modern' was increasingly celebrated as the ultimate solution as well as becoming a marketing buzzword. George Price's book *The Modern Factory: Safety, Sanitation and Welfare*, published in New York in 1914, was the most wide-ranging book on factory design yet published in English and included a definition of the modern factory as it was understood at the time. A number of books on factory design published in the 1910s, 1920s and 1930s continued the theme of the modern factory, a supremely efficient unit, no longer run on paternalist

⁴ Morris, *A Factory*

principles, but by modern production and management systems.⁵ The idea of a factory as ‘model’ was becoming outdated and at ‘modern’ factories, the employees tended to manage their recreational amenities.

These sources, combined with research in company archives, clearly show that gardens and recreation grounds were commonly created at model factories and at modern factories, those that were designed and managed to modern theories and principles of best industrial practice.

The evolution of the model factory to 1900: paternalism and philanthropy

The idea of the model factory evolved through the 19th century to improve conditions in industry for altruistic and commercial reasons and to meet a growing perception of the importance of environment to the image of a company. The concept became fully articulated by 1900, but in its evolution, a definition of a model factory was never fixed, as conditions varied according to the general economic and technical knowledge of the time and to changing legislation on industrial conditions.⁶

From the start of the modern factory system and even before, employers experimented with ways of increasing production through a consideration of the needs of their workforce.⁷ No doubt a combination of altruism and commercial considerations inspired better than average conditions in factories that were above and beyond those driven by legislation and there are a number of well-known examples of ‘enlightened’ patrons and employers, who in the early years of the industrial revolution, ran

⁵ See Souster, E.G.W. *The Design of Factory and Industrial Buildings* (London, 1919); Kahn, M. *Design and Construction of Industrial Buildings* (London, 1917)

⁶ See Price, *Modern Factory*, 69

⁷ *Ibid.*, 290

industrial communities that might be considered model by the standards of the day. For example Samuel Greg, at his factory at Quarry Bank Mill, founded in 1784 southwest of Manchester, fed his apprentices on fresh produce that they grew in the garden of the Apprentice House, gave them rudimentary education and built cottages for his workers with good-sized gardens where they could grow their own vegetables. **[Fig.1.1]** However conditions were far from ideal; discipline was strict, the working day was thirteen hours and when the Ten Hours Movement campaigned for shorter hours, Samuel's son, Robert Hyde Greg, opposed it.⁸ Other industrialists went to great lengths to build architecturally or socially innovative industrial communities such as the foundry at Guise in France, built by Jean-Baptiste Godin based on the principles of the utopian socialist Charles Fourier (1840s), or Roberts Owen's mills at New Lanark.⁹ (The *familistère* at Guise, modelled on Fourier's theory of a communal building, the *phalanstère*, influenced later industrial communities like Pullman, discussed below.) For many aspiring industrialists, the most urgent problem in establishing their factories was how to attract labour, often in limited supply and once they had established a workforce, how to assert control over people used to the less rigid systems of agricultural labour and, particularly for American employers, how to socialise and Americanise newly arrived immigrants.

These were urgent issues for Robert Owen, who, after taking over the management of the New Lanark mills in Scotland from 1800, took radical measures to recruit labour (many were orphans) and to get the best out of his disparate and potentially undisciplined workers, many brought up in rural surroundings dependent on tight

⁸ Nixon, N. and Hill, J. *Mill Life at Styal* (Altrincham, 1986)

⁹ Darley, *Factory*, 45-51, 67-9

social groups and years of tradition.¹⁰ Owen reduced working hours to ten and three quarters, a short working day by the standards of the time and provided education, unemployment benefit, allotment gardens and picturesque ‘walks’ along the banks of the River Clyde.¹¹ **[Fig. 1.2]** Owen’s systems, one of the most innovative and effective being an emphasis on music and dance at the factory inside and outside,¹² were based on his theories of human character and behaviour that he outlined in his book *A New View of Society or Essays on the Principle of the Formation of the Human Character and the Application of the Principle to Practice* (1813-14). Owen compared his workers to living machines, which needed just as much care as the machines in the factory. People’s characters he argued, are not innate, but are shaped by their environment.¹³ So successful were Owen’s methods in running a factory and publicising his methods that visitors flocked to see it, including the Russian Tsar.¹⁴ New Lanark, with its shorter working hours, education and recreation spaces, was model by the standards of the day.

The Americans, who industrialised later than the British, tried, initially relatively successfully, to avoid the overcrowding and poor conditions in British industry and debated fiercely the question of how to drive profitable companies while maintaining the health and moral well being of the workforce.¹⁵ Thomas Jefferson believed that a solution lay in building small-scale manufactories within a traditional agrarian environment and regarded his nail factory at his estate at Monticello in 1790s as

¹⁰ Pollard, S. *The Genesis of Modern Management. A Study of the Industrial Revolution in Great Britain* (Aldershot, 1993), p. 165

¹¹ Price, *Modern Factory*, 69-70

¹² Davidson, L. ‘A Quest for Harmony. Music and dancing at Robert Owen’s New Lanark Community’ *Utopian Studies* (forthcoming, 2011)

¹³ Pevsner, *History of Building Types*, 278

¹⁴ *Ibid.*

¹⁵ Crawford, *Building*, 11-12

integral to the plantation's economy.¹⁶ Other industrialists experimented with building model industrial towns. Jefferson's friend, Colonel David Humphreys had toured European factories and seeing a need for reform, set out to establish a model mill and mill village in the country at Humphreysville, (now Seymour) in the first decade of 1800s and attempted through paternalism to shape its social order.¹⁷ According to Margaret Crawford, Humphreys created 'the first system of industrial labour management in America', but she does not point out that a very similar ideology of management systems was taking shape concurrently in Scotland. There are striking similarities between Humphreysville and New Lanark in that both men employed the 'carrot and stick' systems of rewards and punishment and in the layout and management of the village they emphasised fresh air and open space. Humphreys, like Owen provided housing with gardens and he even organised community theatricals. Both men made military style drill compulsory for the factory boys but Humphreys went further and established a private militia. Conditions at Humphreysville, although highly authoritarian, were considered by contemporaries to be 'model' by the standards of the day.

Despite the apparent success of Owen's methods and systems at New Lanark, and an increasingly vociferous reform movement, conditions in factories worsened. The factory 'hell' and industrial unrest of early 19th century Britain is notorious.¹⁸ Calls for reform that began in the late 18th century culminated in the passing of the first of the Factory Acts in 1802, which set standards of ventilation, sanitation, hours of work and compulsory education in working hours for children. These rules only applied to

¹⁶ See Bender, T. *Towards and Urban Vision* (Baltimore and London, 1982), p. 23

¹⁷ Crawford, *Building*, 16

¹⁸ See Ward, J. T. *The Factory System*. (2 vols., Newton Abbot, 1970); Thompson, F. M. L. *The Rise of Respectable Society. A Social History of Victorian Britain 1830-1900* (London, 1988)

large factories and there was widespread evasion of the Acts and so there was plenty of scope for factory owners wishing to exemplify, to create model conditions that exceeded the requirements of the Acts. J.T. Ward gives a number of examples in his volumes, *The Factory System*, including a mill in Bradford run by a Mr John Wood, who employed 600, mostly girls. Wood provided education and a doctor and he allocated an hour for dinner followed by recreation in the factory yard. [Fig. 1.3] In the last quarter of the 19th century, a paternalistic approach in factories was common and certain provisions for workers, such as education, almost commonplace. For a factory to be model, it had to achieve relatively high standards beyond what was required by the legislation.¹⁹

By the mid 19th century, the factory was just one of many institutions going through a period of reform that was affecting all towns and cities. A combination of altruism and a desire to create stable and respectable urban environments and increase affluence drove industrialists to promote and fund civic amenities like libraries and parks, town halls and public health, and often it was this group that pioneered reform. However, unsanitary conditions and ill health prevailed in industrial towns.

These factors inspired Titus Salt to build a new factory and factory village, Saltaire, outside Bradford from 1851.²⁰ Historians frequently applaud Salt for creating the most comprehensive and successful model industrial village of the time. It was a turning point in the evolution of the model factory and factory village due to the design and amenities of the state-of-the-art factory and for the attention to detail of the site's plan and the quantity and quality of the buildings and amenities supplied for the

¹⁹ Joyce, P. *Work, Society and Politics, the Culture of the Factory in Later Victorian England*, (Aldershot, 1991), p. 170

²⁰ Styles, J. *Titus Salt and Saltaire* (Saltaire, 1990), pp. 10-12

workers' use. These shaped and controlled all the social and cultural activities of the workers lives, from washing and bathing, to education and entertainment. The mill itself, built to the best specifications of the day, was architecturally splendid and significantly was one of the first industrial buildings to be illustrated in the highly regarded architectural journal, *The Builder*. It was designed to suggest an Italianate palace, was celebrated as 'a palace of industry' and 'the largest and best contrived of factories'.²¹ The factory workers, though paid no more than average, had a sickness insurance scheme to which the company contributed, a dining hall and annual works outings to the seaside or other destinations, including Salt's mansion.²² In addition to model conditions in the factory, the village where most of the operatives lived was designed to supply all needs - houses, shops, baths, school, institute, hospital, eleven acres of park, allotments and a Congregational church. [Fig. 1.4] Salt's method was to exert complete social and cultural control of his workforce by establishing an integrated industrial site, 'a capitalist republic with a benevolent dictator' according to R.J. Morris.²³ His methods worked from his point of view, for there was little industrial unrest at the factory and only two brief strikes in the first thirty years of the mill's life.²⁴ However a good environment was not necessarily a recipe for industrial stability and where other conditions prevailed to create unrest, a designed environment could not prevent it, as will be seen below.

Historians agree that conditions in the factories and factory villages in America were better than in Great Britain at the same time, but were 'unquestionably bad and

²¹ James, J. *History of Worsted Manufacture in England* (London, 1857), pp. 467, 469 in Jones, *Industrial Architecture*, 96

²² Styles, *Titus Salt*, 16-21

²³ Morris, R. J. 'The Industrial Town' in Waller, P. *The English Urban Landscape* (Oxford and New York, 2000), p. 197

²⁴ Styles, *Titus Salt*, 20

deteriorated further as the factory system expanded.²⁵ American industrialists had different considerations in attracting and managing their workforce, due to the scale of the country, a relative lack of urban centres, and a labour force which consisted increasingly of disparate immigrant groups often hostile to each other. It was more common than in England therefore for manufacturers to provide housing from the start.²⁶ From the 1790s, large mills were established in Massachusetts (there were 54 mills in Massachusetts by 1810 according to Pevsner), the most renowned being those at Lowell (from 1813), which was regarded as a model company town by visitors like Charles Dickens, who visited in 1841. **[Fig. 1.5]** He found the factory girls healthy and cheerful and marvelled to see them attending evening lectures and classes, playing the piano supplied by the boarding houses, and reading books from the town's library.²⁷ Despite these 'model' conditions, hours were long and discipline was strict.²⁸ Margaret Crawford has argued that Lowell was never designed as a model company town as it had no 'conceptual order' and that the girls' extra work activities were organised on their own initiative and supported by the church rather than by corporate philanthropy.²⁹ If Lowell was not a model factory town, conditions there might be considered to be model, but even these did not prevent industrial unrest, for in 1834 the Lowell girls went on strike against a wage cut.

The American industrial revolution was still in its early stages even by 1860,³⁰ and most factories were small scale, but after the Civil War, industrialisation was rapid

²⁵ Jones, M. A. *The Limits of Liberty American History 1607-1992* (Oxford, 1995), p. 128

²⁶ Pevsner, *History of Building Types*, 280

²⁷ Simmons, J. C. *Star Spangled Eden: 19th Century America Through the Eyes of Dickens, Wilde, Francis Trollope, Frank Harris and Other British Travellers* (New York, 2000), pp. 104-5

²⁸ Cochran, T.C. and Miller, W. *The Age of Enterprise. A Social History of Industrial America* (New York, 1965), p. 21

²⁹ Crawford, *Building*, 25

³⁰ Although there were already substantial industrial towns like Pittsburgh, which in the 1830s was described by travellers as dirty and smoky. Pevsner, *History of Building Types*, 281

(between 1860 and 1900, industrial production increased in value from under \$2,000 million a year to more than \$13,000) and by 1894, American industry was producing twice as much as British industry.³¹ Businesses amalgamated to create much larger industrial units and as industry grew so social problems spread, with industrial unrest and often violence.³² In the 1880s and 1890s, strikes were frequent with over 24,000 industrial disputes between 1880 and 1900 and between 1902 and 1904 alone, 180 union men were killed, 1,600 injured and over 15,000 were arrested in the course of strikes.³³ The infamous strike at the Pullman Palace Car Company in 1894 is significant because it took place at a company that was considered to be a model employer. George Pullman, in an attempt to use design and authoritarian paternalism to prevent industrial unrest, built an initially much-praised model factory and town outside Chicago from 1881, but the scheme failed as will be discussed in the next chapter.

As American industry grappled with increasing social unrest, British industry, had recovered from the worst of the social problems brought by industrialisation and the relationship between capital and labour were relatively stable. Experiments and theories in industrial organisation were synthesizing into a consensus on methods of factory organisation and the concept of the model factory evolved into more than just basic educational and recreations facilities. F.M.L. Thompson has argued that by the 1850s, more substantial and expensive forms of paternalism were common in larger firms – the provision of newspaper rooms, reading rooms or libraries, occasionally bathhouses and later in the century, gymnasia and works canteens were more

³¹ Jeansonne and Lührssen, 'A Time of Paradox', xxii

³² Historians agree that the pace of change exacerbated social unrest. Wynn, N. A. *Progressivism to Prosperity: World War I and American Society* (New York and London, 1986), p. 2; Jones, *Limits of Liberty*, 295

³³ Wynn, *Progressivism*, 7

common. Larger factories were becoming complete social institutions, often a focal point for a community providing music and other clubs and social events.³⁴

A significant addition to the amenities provided at the larger factory was the works sports and recreation ground, into which a pleasure ground was incorporated or appended for those who wished to rest or eat lunch outside. Some employers made exercise compulsory for the youngest workers and provided allotments for employees' children. These types of landscapes arrived in the 1890s, pioneered in Britain by the Cadbury Brothers who, from 1878, created the most celebrated model factory in Britain.³⁵ George and Richard Cadbury built a business empire driven by their Quaker values, which encouraged enterprise and wealth accumulation for the benefit of social reform, and the welfare of their workforce was paramount in their plans for the new factory.³⁶ The brothers took advantage of the land that came up for sale near their plant to provide separate recreation spaces for men and boys and 'girls', which they opened in 1896. **[Fig.1.6]** The Cadburys, closely followed by a fellow Quaker, Seebohm Rowntree in York and other reforming industrialists like William Lever at Port Sunlight, were masters of benevolent manipulation or paternalism, and with their works at Bournville, the model factory can finally be said to have arrived. Although the Cadburys built a model village adjacent to the factory, their genius as philanthropists and developers was to make sure that the village and factory were independent. The amenities provided at Cadbury were clearly centred on the factory (the villagers had their own) and right from the start, the Cadburys gave

³⁴ Thompson, *The Rise of Respectable Society*, 213

³⁵ This point is supported by the frequency with which Bournville is mentioned in all the original sources.

³⁶ See Cadbury, D. *Chocolate Wars. From Cadbury to Kraft: 200 Years of Sweet Success and Bitter Rivalry* (London, 2010), p. 3. Deborah Cadbury points out that the Cadbury family photograph album included photographs of some of the most influential thinkers on social reform of the period, including John Ruskin, Thomas Carlyle and Charles Dickens.

control of the company clubs and other amenities to elected workers and some to paid professionals.

The need to attract a high quality and stable workforce and the promotion of good industrial relations have been established as key factors in the evolution of the model factory. At the best factories, employers paid higher than average wages, built well-designed buildings and provided recreational educational and other amenities and increasingly offered other benefits like pensions and sometimes a form of profit sharing. Toward the end of the 19th century, it was seen to be good practice to promote a high moral tone at work to attract and keep the best workers. Some, like Seebohm Rowntree believed that the workplace had an even more beneficial influence upon the character of the working classes than the church and was as important as schools in shaping the characters of youth.³⁷ As demand for high quality female workers increased, and supply waned, the need for respectability to attract the best workers was an important factor. This has already been seen at the Lowell mills, where in order to satisfy the New England farmers that their daughters' morality would be preserved at work, the girls were housed in highly supervised lodging houses and encouraged into respectable leisure activities like reading and music.

By the end of the century, the employment of women in factories became an important factor in the improvement of conditions at factories. By this time, there was a smaller supply of working women than there had been in the mid 19th century³⁸ and with more light industries needing employees, particularly in foods and

³⁷ Meakin, *Model Factories*, 33-4

³⁸ McKibbin, R. *Classes and Cultures, England 1918-1951* (Oxford, 1998), p. 111. There were also increasing opportunities in office work and retail that were usually more desirable for women than factory work.

engineering, which tended to involve boring repetitive work, women workers looking for a job between school and marriage were desirable, partly for their malleability due to social and political inequalities and because they were cheaper. Work for many women (and their husbands and fathers) was seen as inferior to domestic life and simply a preparation for marriage; therefore by the early 20th century, for most women, life in employment was short. Women were also sometimes put off work by trade unions that tended to be hostile, particularly to women in skilled or semi skilled jobs.³⁹ To attract the best women workers therefore, factories had to appear respectable, even desirable and so an attractive institution with plenty of social and cultural life, the provision of separate entrances for men and women, staggered working hours and a female welfare or social manager was an ideal. Ross McKibbin has shown how some companies in the early 20th century, seeking more female employees in the growing numbers of light industries, used ‘art’ to attract the choosy female worker. Girls and their parents were drawn to companies with ‘taste’, for that attribute, they thought, brought with it respectability and class.⁴⁰ It was common for works of art to be placed in dining rooms and rest rooms and as will be discussed below, the factories with the most elaborate gardens often employed a large proportion of women.⁴¹

The NCR was one company where their female workforce was promoted as respectable (“the only factory in town in which the girls are known to be ladies”⁴²), although according to Daniel Nelson, historians have tended to exaggerate that factor

³⁹ Ibid., p. 111

⁴⁰ Ibid., p. 244

⁴¹ An article on women in industry in *Industrial Welfare and Personnel Management* in April 1930, suggested that ‘the better type of girl’ now preferred factory work to office work following improvements in conditions in factories, (pp. 21-2).

⁴² Meakin, *Model Factories*, 59

since only one sixth of the workforce at the NCR was made up of women.⁴³ The Cadburys at Bournville, the Rowntrees in York, the Spirella Corset Company at Letchworth Garden City and Boots in Nottingham employed a high proportion of women, (in 1899, Cadburys' employed 1900 women and 600 men and 200 clerks according to Gilman⁴⁴). While many firms including Cadbury and Rowntree (Quaker firms), Boots, Raleigh and John Player would only employ unmarried women, for they believed a married woman's place was in the home, Spirella preferred older married women as they needed less training.⁴⁵ For Cadbury and Rowntree in particular, where women and men did not mix on the factory floors, women were seen as valuable assets in promoting the company image, for they appear prominently in photographs taken for the company magazine or for other publicity purposes. The position and representation of women at factories will be explored further in subsequent chapters.

By the early 20th century a more politicised working population, male and female,⁴⁶ with increasing expectations of upward social mobility and a general presumption of better standards and conditions at work was driving industrialists to provide attractive workplaces with good pay and conditions.⁴⁷ By this time, the workforce, particularly in America, was less amenable to being patronised by a benevolent father figure and factory design and management began to be organised into fully-fledged professional systems.

⁴³ Nelson, D. *Frederick W. Taylor and the Rise of Scientific Management* (Madison, 1980), p. 17

⁴⁴ Gilman, *A Dividend to Labor*, 191

⁴⁵ Miller, M. *Letchworth. The First Garden City* (Chichester, 1989), p. 117

⁴⁶ In Britain, women over 30 were enfranchised in 1918 and in 1928 were awarded the same voting rights as men. Some American states granted the suffrage to women at the end of the 19th century, although this was made nationwide in 1920. Trade union membership increased rapidly during and after the First World War. See Beard, M. *A Short History of the American Labor Movement* (New York, 1920), p. 151

⁴⁷ Stevenson, J. *British Society 1914-45* (London, 1984); Thompson, *The Rise of Respectable Society*

Welfare capitalism and the modern factory

By 1920 the idea of a modern factory was no longer defined by a paternalistic concern for the welfare of the workforce, cared for and overseen by a benevolent father figure, but as a professional social and economic system with close worker involvement, and organised by professional management systems. Writers agree that American industrialists were in the forefront of this pioneering work.⁴⁸ The speed and success with which the US industrialised was due in part to the professionalism of its industrial and management systems and welfare work was part of this. It is significant that George Cadbury sent his son, George over to the NCR in 1902 to study their methods.⁴⁹ On his return an employee 'Suggestions Scheme' modelled on the one at the NCR, was adopted at Bournville.⁵⁰ Twelve years later, the Cadburys again decided that they could learn from the Americans and Laurence Cadbury, George's younger brother, went to the US for a year (in 1913), dividing his time between travelling and working at the NCR.⁵¹ So, despite the already well-developed welfare systems already in place in Britain, it was judged that more could be learned from the American system.

Neil A. Wynn has shown how by the early 20th century, after a period of rapid industrialisation, conditions in some American factories and towns had become

⁴⁸ See for example Fitzgerald, R. *British Labour Management and Industrial Welfare 1846-1939* (London, New York, Sydney, 1988), p. 7; Bucknell, L.H. *Industrial Architecture* (London, 1935), p. 67 and Jacoby, S. M. *Employing Bureaucracy: Managers, Unions and the Transformation of Work in American Industry 1900-1945* (New York, 1985), p. 49

⁴⁹ In the same year, Alfred Mosely and representatives from the leading trades unions in the UK (Mosely Industrial Commission) spent three months touring factories in the USA to study industrial conditions. The NCR was highly praised as '...the most progressive of its kind to be found in the States.' See *Reports of the Mosely Commission to the USA Oct-Dec 1902*, (1903), p. 243

⁵⁰ 'A Quarter of a Century's Survey. Mr Edward Cadbury's Address at the New Year Party' *BWM* XXII:3 (March 1924), pp. 73-6, CB

⁵¹ Interview with Sir Adrian Cadbury at his home on 17 April 2009. Adrian was Laurence's son. George and Laurence were sons of George Cadbury, who, together with his brother Richard were responsible for building the factory and village at Bournville.

reminiscent of Dickens' England: crowded, filthy, and dangerous areas peopled by impoverished, ill-nourished, and unhealthy industrial workers.⁵² While the nation grew wealthier, industrial workers' lives remained insecure with many suffering low wages and there was little recourse to welfare.⁵³ Yet alongside some appalling conditions, industrialisation was creating a period of unprecedented economic prosperity, which provided the conditions for reform. One of the effects of industrialisation in the US was the rapid growth of the professional and the clerical classes (from 756,000 in 1870 to 5,600,000 in 1910) and it was these people who demanded and worked for change (Progressives).⁵⁴ It was felt that industrialisation had destroyed social harmony and the Progressives, although politically a diverse group, were unified by a crusade for change.⁵⁵ In industry, reform took the form of 'welfare capitalism', thought to be the best way to prevent labour unrest.⁵⁶

Some historians have argued that the underlying motivation of welfare capitalism was to prevent unionisation - many companies sponsored 'company unions' to discourage trade union membership⁵⁷ - but this is too simplistic a view since many employers with active welfare programmes supported unions, including Cadbury, where the directors actively encouraged their workers to join trade unions.⁵⁸ Welfare capitalism was motivated by a need to improve relations between employer and employee and to

⁵² Wynn, *Progressivism*, 4-5

⁵³ Cochran, T.C. *Social Change in Industrial Society: Twentieth Century America* (London, 1972), p. 126

⁵⁴ Wynn, *Progressivism*, 8. See also Buenker, J.D., Burnham, J. C. and Crunden, R.M. *Progressivism* (Cambridge, 1977)

⁵⁵ Hays, S.P. *The Response to Industrialism 1885-1914* (Chicago, 1957), pp. 72-3

⁵⁶ John Patterson of the NCR confided to his landscape architect J.C. Olmsted in 1906 that he had instituted the men's dining hall at the factory '...largely to keep the men from going to cheap restaurants down town where they had too much socialistic and incendiary talk.' Olmsted memorandum December 6, 1906, LC.MD.OAR, Series B Reel 20

⁵⁷ Cochran and Miller, *The Age of Enterprise*, 246

⁵⁸ Dellheim, C. 'The Creation of a Company Culture. Cadbury 1861-1931' *The American Historical Review* 92:1 (Feb 1987), 13-44. Patterson's view of unions was more ambivalent - see Nelson, D. 'The New Factory System and the Unions: the National Cash Register Company Dispute of 1901' *Labor History* 15:2 (1974), 163-178

socialise workers, to promote stability, loyalty and therefore profit.⁵⁹ Reforms included improving working conditions, extending recreational facilities, profit sharing, life insurance and pension schemes and in many companies, the workforce was given control of the amenities allowing them a semblance of control over their working lives in an attempt to maintain stability.⁶⁰ The range of schemes for welfare was so diverse that a US government study in 1916 defined it as ‘anything for the comfort and improvement, intellectual or social, of the employee, over and above wages paid, which is not a necessity of the industry nor required by law.’⁶¹ Not surprisingly, some schemes worked better than others. The Ludlow Manufacturing Associates of Massachusetts, where by 1905 the welfare measures were largely run by the workforce, told Budgett Meakin that they had achieved the perfect welfare formula,⁶² but four years later they had a major strike, so clearly the welfare programme wasn’t enough to prevent industrial unrest.⁶³

The National Cash Register Company, the ‘pioneer firm in industrial betterment’ according to Meakin,⁶⁴ was one of the first companies to set up a welfare department, driven by an Owenite-type belief in the value of an attractive environment to industrial efficiency. In the mid 1890s, following the return of a faulty consignment of cash registers to the plant, the president of the NCR, John H Patterson decided that poor efficiency was due to dissatisfied workers, so to improve satisfaction, he

⁵⁹ Hareven, T.K. *Family Time and Industrial Time. The Relationship between the Family and Work in a New England Industrial Community* (Cambridge, 1982), p. 39

⁶⁰ Jones, *Limits of Liberty*; see also Jeansonne and Luhrssen *A Time of Paradox*, 113

⁶¹ ‘Welfare Work for Employees in Industrial Establishments in the United States’, *U.S. Bureau of Labour Statistics Bulletin* (250, 1919), p. 8, quoted in Jacoby, *Employing Bureaucracy*, 49

⁶² Meakin, *Model Factories*, 31-2

⁶³ Brandes, S. D. *American Welfare Capitalism 1880-1940* (Chicago and London, 1976), p. 138

⁶⁴ Meakin, *Model Factories*, 52

landscaped the factory and provided incentives for local residents to beautify the neighbourhood and introduced new management systems and a welfare programme. [Fig. 1.7] In outlining his principles for business for his biographer two years before he died, Patterson said: ‘Treat people well and they will treat you well...They (employees) will give you their best if they think you are giving them your best...It pays to do good; it pays to help them [the workers] to help themselves in every moral and physical way’⁶⁵ [Fig. 1.8] The slogan ‘It Pays’ appeared on signs all around the factory, to reinforce the message.⁶⁶ After the strike in 1901 in which the welfare programme played a small role, (since the officious welfare secretary was sacked) Patterson opened a new labour department that Nelson argues was the first modern personnel department in American industry as it handled labour issues such as safety and grievances as well as welfare. By 1915 many large firms had opened such departments, those of U.S. Steel (from 1911) and the Ford Motor Company (from 1914) being two of the best known,⁶⁷ and companies competed in the elaboration of the amenities they offered.

Jacoby has shown how professional groups in the US, working in the areas of social service and charity work in the first decade of the 20th century, encouraged the

⁶⁵ Crowther, S. *John H. Patterson. Pioneer in Industrial Welfare* (New York, 1923), p. 194. It is likely that Patterson’s wife influenced his zeal for reform. She came from a prominent New England family, and as John D. Buenker *et al* have pointed out, a large percentage of progressive reformers had a New England background. See Buenker *Progressivism*, 7

⁶⁶ Sir Adrian Cadbury remembers his father, Laurence, recalling with amusement these signs and other motivational slogans posted inside and outside at the NCR factory. Interview with Sir Adrian Cadbury, 17 April, 2009

⁶⁷ Between 1912 and 1925 the U.S. Steel Corporation spent over \$158 million on its welfare programme to provide playgrounds, schools, clubs, gardens, safety features, accident relief payments and pensions. ‘United States Steel Corporation Welfare Expenditures, Jan 1st 1912- Dec 31st 1925’ *Bulletin No. 11, United States Steel Corporation (Dec 1925)* in Biggs, *The Rational Factory*, 66. Henry Ford introduced a minimum wage, a shorter working week, profit sharing and sports facilities, but he used architecture, not landscaping to distinguish his factories. See Hareven, *Family Time*, 38

welfare movement that had already been active for twenty years, to professionalise.⁶⁸ The activities of groups like the American Institute for Social Service (AISS) founded in 1902 and the National Civic Federation (NCF) that opened a welfare department in 1904, support the idea that the Americans led the way in welfare.⁶⁹ The NCF was dedicated to achieving stability through co-operation with labour⁷⁰ and initially enjoyed the support of both unions and anti-union employers.⁷¹ Their welfare department provided advice to its corporate members, (250 employer members in 1906 and 600 in 1911⁷²) published prolifically, held conferences and ran an employment agency for welfare secretaries.⁷³

In Britain the professionalisation of welfare arrived during and just after the end of the First World War, which marked a turning point in industrialists' thinking about the value of management systems. Harold Perkin, in his history of the 20th century in Britain, which he argues, is characterised by the rise of the professional expert, shows how the government and industry came up against difficulties in inducing the co-operation of industrial workers in the war effort and could now appreciate the value of management systems and training.⁷⁴ Companies that had already developed professional welfare systems were influential, notably Cadbury. Following more than a decade as Managing Director of the company (from 1899) during which he took a great personal interest in company welfare, Edward Cadbury published his

Experiments in Industrial Organisation (London, 1912) and the book became a highly

⁶⁸ Jacoby, *Employing Bureaucracy*, 60

⁶⁹ The AISS was founded by the Reverend Josiah Strong, a minister of the social gospel and William Tolman, author of *Social Engineering* (1909)

⁷⁰ Wynn, *Progressivism*, 12

⁷¹ Hareven, *Family Time*, 40

⁷² 'How the welfare department was organised' *The National Civic Federation Monthly Review* (1 June 1904), pp. 13-14, quoted in Nelson, *Frederick W. Taylor*, 19

⁷³ See 'What is Welfare Work?' *National Civic Federation Monthly Review 1* (August 1904), p. 5, quoted in *Ibid.*, p. 16

⁷⁴ Perkin, H. *The Rise of Professional Society since 1880* (London, New York, 1989), pp. 302-4

regarded source on corporate welfare in the early 20th century (Patterson of the NCR owned three copies of the book⁷⁵). Cadbury explained how the firm's policies towards the management and welfare of their workers were essential factors in the company's successes. In this climate of reform, the Welfare Workers Association was founded in 1913 to represent welfare professionals (it became the Institute of Industrial Welfare Workers (IIWW) in 1925⁷⁶) and the Industrial Welfare Society (IWS) began in 1919 to represent the employers, including the Cadburys, who paid the highest subscription.⁷⁷ In 1920 one of the few industry-wide welfare organisations, The Miners' Welfare Fund was founded which became renowned for the establishment of social benefits for those working in the coal industry, including an extensive provision of social clubs (Miners' Institutes) and recreation grounds.⁷⁸ (See Appendix 2.) However, despite attempts by industry to persuade the Trades Unions to join welfare institutions like the IWS, 'Labour on the whole remained hostile and the Trade Union Congress in 1932 condemned industrial welfare as an anti-union tool.'⁷⁹

The First World War also encouraged the spread of welfare capitalism in America.⁸⁰

Experts, in the form of social engineers, welfare secretaries and often the industrial engineers themselves increasingly supervised the organisation of labour. H.G.T.

⁷⁵'Catalogue of John H. Patterson's Personal Library', NCR.DH

⁷⁶ See Proud, E. D. *Welfare Work. Employers' Experiments for Improving Working Conditions in Factories* (London, 1916) and Kelly, E. T. (ed.) *Welfare Work in Industry* (London, 1925). Dorothea Proud was appointed to the Welfare Department of the Ministry of Munitions set up by Lloyd George to improve conditions in factories for the hundreds of thousands of women who entered industry in the First World War.

⁷⁷ The IWS, founded by a civil servant, Edward Hyde, was independent of the IIWW. Hyde's suggestion that the two organisations should merge was rejected by the IIWW, which was an association of independent members in welfare professions. The IWS had an employer-based membership. The IIWW became the Institute of Personnel Management in 1946 and is now the Chartered Institute of Personnel and Development. The Industrial Welfare Society became the Industrial Society and is now the Work Foundation, UW.MRC, MSS HF/1/e

⁷⁸ See Morgan, W.J. 'The Miners' Welfare Fund in Britain 1920-1952' *Social Policy and Administration* 24:3 (November 1990), 199-211

⁷⁹ Fitzgerald, *British Labour Management*, 204, from Sidney, E. *The Industrial Society 1918-1968*, pp. 6-8, 11-15

⁸⁰ Wynn, *Progressivism*, 107

Cannons' *Bibliography of Industrial Efficiency and Factory Management* published in London and New York in 1920, illustrates the high level of interest and debate in management systems, including welfare, in Britain and America at that time.

Assuming that the number of publications available on a subject is the litmus test for levels of activity, it is clear that most of the discourse took place in America. Of the 62 sources listed by Cannons on factory welfare work, 40 (or 65%) were published in America, mostly in New York, between 1900 and 1920. This is not to ignore the fact that key books on welfare were published in England, two of them sponsored by the Cadburys: Budgett Meakin's *Model Factories and Villages* (1905) and Edward Cadbury's *Experiments in Industrial Organisation* (1912).

It would be wrong to suggest that welfare in factories was the norm in Britain between the Wars because, as Robert Fitzgerald has argued, on the whole working conditions were poor.⁸¹ However, welfare was 'extensive and pervasive across every sector of industry' and was therefore a significant force for change.⁸² Good welfare provision was regarded as part of a modern industrial outlook and by the 1930s, many companies were using modern architecture and design not only to enhance their welfare provision but also to promote it. In Britain, some, like Hoover employed the popular modern or 'moderne' style for their factories. (Appendix 2.) The Boots Company was more radical, choosing Owen Williams to design a state-of-the art glass and concrete factory building inspired by European modernism. Boots hailed their building, D10, opened in 1933 as 'a Model and Modern factory.'⁸³ To be fully modern, companies needed not only well-designed factory buildings, but also space for recreation and Boots provided all of these. (Appendix 1.) As suggested by *The*

⁸¹ Fitzgerald, *British Labour Management*, 208

⁸² *Ibid.*, 186

⁸³ Promotional leaflet, BC A85/7

Architects' Journal of Wednesday 13 January 1932, in a number dedicated to factories, even in a period of economic stress, sports grounds remained one of the pre-requisites for the 'modern' factory:

'No factory today can be considered up to date unless it is equipped with dining-rooms. Most reasonably large factories require rest rooms, clinics, research laboratories, and libraries as well, while many of the largest provide gymnasia, swimming pools, concert halls and sports club grounds and buildings.'⁸⁴

Conclusion

This chapter has shown how the concept of the model factory that emerged in the 19th century, developed into the 'modern' factory by the 1920s and 1930s as recreational amenities that were originally considered to be luxuries, became more common and even expected in industrial life. The next chapter will review the extent to which the making of gardens and recreation grounds became part of the modern industrial outlook and will introduce the types of factory landscape that emerged from the 1880s.

⁸⁴ 'Opportunity' *The Architects' Journal* 35 (1932)

Chapter 2: The Evolution of Factory Landscapes

Budget Meakin described in *Model Factories and Villages* that when the Weston Electrical Instrument Company of Newark, New Jersey was thinking about plans for a new works, they sent two mechanical and engineering experts to study the most famous factories in the US to collect ideas. Together with another ‘expert’, they spent a year traveling all over the US to see what other employers were doing for their employees. The company went on to build a model plant with spacious facilities, covering seven acres of an estate of 27 acres of woods and lawns. In Meakin’s opinion, all ‘conscientious’ employers would be advised ‘...to secure a site with elbow room and natural advantages.’⁸⁵ Meakin’s example confirms that some factory planners were looking for creative ways to make interesting and functional space for factory social and cultural life and welfare.⁸⁶ At some works, creativity extended to attractive landscaping at the factory, particularly around the entrance and the offices.

This chapter will assess current knowledge on factory landscaping in Britain and the USA drawn from secondary sources on social and industrial history and from architectural history, together with the primary sources on the ‘model’ and the ‘modern’ factory and from the publications of the Industrial Welfare Society (UK). The landscape history of factories should be seen in tandem with the architectural history, but the design of the buildings will not be discussed in any detail. The chapter will begin with an outline of precedents in factory landscaping from the 18th century and how these developed until the 1880s when George Pullman built his innovative industrial town. The discussion will continue with an outline of the influence of social

⁸⁵ Meakin, *Model Factories*, 67

⁸⁶ The following source confirms this: Hunter Bradley, B. *The Works: the Industrial Architecture of the United States* (New York, 1999)

and welfare reform on factory landscaping from 1880 – 1939 and the chapter will end with an introduction to the case studies. The discussion will show how the developing movement for welfare capitalism and an understanding of the importance of the factory environment to the corporate image, provided the conditions for new types of factory landscape by 1900: cosmetic landscaping, the pleasure garden, the recreation ground and the children's allotment garden.

Landscaping at factories from the late 18th century to 1880

In the early industrial revolution, most factories had 'natural advantages' as they occupied rural landscapes or were built as extensions to farmhouses or sited adjacent to the owner's country house.⁸⁷ Developers often exploited the possibilities presented by the necessity for fast flowing water. Some of the earliest powered water mills, like the Lombe Brothers' silk mill, built in the early 1720s along the banks of the River Derwent, or the Darbys' iron mills at Coalbrookdale situated in a deep river gorge, look picturesque, even sublime, in prints and drawings, although those qualities were exploited for artistic and no doubt promotional effect. **[Fig. 2.1]** There is much evidence to suggest that the 18th and 19th century factory owner, far from trying to disguise the factory from his house, displayed his enterprise proudly as a significant part of his estate. Humphrey Repton made much of the picturesque qualities of Armley Mill in his re-design of Benjamin Gott's mill near his county seat, Armley House.⁸⁸ Repton flattered Benjamin Gott by featuring his flagship Mill in the 'after' view in the Red Book of 1810 where the imposing building presented an 'eye catcher' backdrop to the water meadows, while up the hill sat Gott's country seat, Armley

⁸⁷ Darley, *Factory*, 21

⁸⁸ *Ibid.*, 25. See also Daniels, S. 'Landscaping for a Manufacturer. Humphry Repton's Commission for Benjamin Gott at Armley, 1809-10' *Journal of Historical Geography* 7:4 (October 1981), 379-88

House. Sir Richard Arkwright, in building his second mill, Masson from 1783, embellished it with Palladian windows and a cupola and shortly afterwards, commissioned a gothic-revival country house just across the river from the mill.⁸⁹ The mill cannot be seen from the house, but it is clear from walking around the gardens today, that views of the mill from the river walk were designed to impress on visitors Arkwright's dual position as country gentleman and entrepreneur.

Earlier industrialists found some more unusual advantages of the close proximity of the factory to their country house. In 1746, the Quaker industrialist William Champion moved his works from the centre of Bristol to Warmley in Gloucestershire and built a zinc-smelting factory next to his Palladian residence, Warmley House. In the gardens he made around the house from 1746 to 1769, Champion recycled the zinc smelting processes that he had invented and patented, to provide unusual colours and textures to his garden features. He created a dramatic grotto, its interiors decorated with black slag and clinker, by-products of the smelting process and made a chequered walled garden, set into the hill on which Warmley House stands. The wall is punctuated by arched openings and infilled in a pattern of black slag blocks, brick and clinker. **[Fig. 2.2]** The whole complex is an 'industrial utopia' for the plan clearly indicates that his house, the factory and the pleasure gardens are integrated while the lake performs the dual function of ornamenting the garden and supplying water to the works. The water was circulated from the works back to the lake via the grotto, making a cascade there. The most startling feature is a huge statue of Neptune, also partly constructed from clinker waste from the factory, which overlooks the lake. **[Fig. 2.3]** It seems likely that Champion made his garden features to impress clients

⁸⁹ Jones, *Industrial Architecture*, 24-6

as well as family and friends, as the house, factory and garden are so clearly unified, functionally and aesthetically.⁹⁰

There is very little evidence of worker experience at these early factories, but as most of the workforce came from rural areas in the early history of factory production it is unlikely that the physical setting had much influence on their choice of workplace, (where they had a choice). However, the buildings in their sheer scale must have been impressive, or indeed oppressive. Precedents for factory buildings ranged from the austerity of prisons and orphanages, often similar in terms of organisation and management,⁹¹ to the landed estate or royal palace, but all these models communicated a clear message to the workforce that they were establishments that employed strict rules and hierarchies.⁹²

Between 1780 and 1850, when in Britain factories were more commonly built in towns,⁹³ landscaping tended to be reserved for the manufacturer's private house, often situated in the countryside far from the overcrowding and pollution of the industrial town. In Manchester in 1844, Faucher observed that the merchants and manufacturers lived in detached villas in the midst of gardens and parks in the country. 'The rich man spreads his couch amidst the beauties of the surrounding country and abandons the town to the operatives, publicans, mendicants, thieves and prostitutes...'.⁹⁴ Reformers blamed the loss of rural values and healthy environments for the ill health and misery of the factory workers and the countryside is frequently a

⁹⁰ *Warmley Conservation Area Advice Note 30* (South Gloucestershire Council, 1998) and a visit to the house and Kingswood Heritage Museum, 10 September 2006

⁹¹ Pollard, *The Genesis*

⁹² Darley, *Factory*

⁹³ Morris, *The Industrial Town*, 181

⁹⁴ Faucher, quoted in Perkin, H. *The Origins of Modern English Society* (London, New York, 2002), p. 173

metaphor in literature for human happiness and dignity, the place where God resides.⁹⁵

Factories were not exclusively in the country or the town but were often just outside towns, as were the Turton Mills, near Bolton in the mid 1900s, owned by the liberal Quaker brothers Edmund and Henry Ashworth. William Cooke Taylor's account of his visit to the mills in 1842, though idealised (he supported factory owners against their critics), suggests that some mill owners were at pains to beautify the factory with planting. Having dismissed the quantity of smoke in the valley as 'pleasing and picturesque', he described the mill, built at the bottom of the ravine, just under the owner's residence:

Fruit trees, unprotected by fence, railing or palisade, are trained against the main wall of the building, and in the season the ripe fruit hangs temptingly within reach of every operative who goes in or out of the mill. There is not an instance of even a cherry having been plucked, though the young piecers and cleaners must pass them five or six times a day...⁹⁶

Cooke Taylor fails to acknowledge the punishment that might ensue should an operative be caught stealing the fruit, but this is clearly an attempt by the Ashworths to make the factory environment more attractive.

In America, entrepreneurs regarded the creation of company towns as a solution to social exploitation and degradation of the landscape, although as Margaret Crawford has pointed out, the reality expressed the inherent tensions of capitalist production.⁹⁷ Engravings of the textile town of Lowell, suggest that landscaping and tree-planting contributed to the aura of order and respectability that was deemed necessary to

⁹⁵ See for example Jones, E. 'The Factory Town' in *The Battle-Day, and Other Poems* (London, 1855), p. 82, quoted in Ward, *The Factory System*, 33

⁹⁶ Cooke Taylor, W. *Notes of a Tour in the Manufacturing Districts of Lancashire* 2nd edition (1842) quoted in *Ibid.*, 63

⁹⁷ Crawford, *Building*, 12

persuade the fathers of the mill girls that their virtue would remain intact. [Fig. 2.4] The girls, many of whom were farmers' daughters, improved their own lives in the town with educational and cultural initiatives. They seemed to acknowledge the value of nature to the quality of life, for one edition of their monthly magazine, the *Lowell Offering*, included an editorial on plants and flowers in the mill, symbols of home and chastity perhaps.⁹⁸

In England, Titus Salt's factory and village of Saltaire was built in the belief that environment could shape morality and behaviour. Salt had employed the architects Lockwood and Mawson in the 1860s to produce a unified plan for Saltaire, which included factory, village and park.⁹⁹ In America, the practice of factory landscaping took a dramatic new turn twenty years later with the building of the company town of Pullman from 1880, and it is thought that George Pullman visited Saltaire during his visit to Europe in 1873.¹⁰⁰ Although Pullman was a company town and therefore does not strictly qualify as an example of the type of factory garden that is discussed in this study, it is important to discuss the landscaping there in some detail, because it set some important precedents in the idea of factory landscaping. Pullman became both a model and a warning in America and Europe for how good design had to be combined with fair social practices to contribute to business success.

The landscaping of Pullman, Illinois

The idea of employing a professional landscape architect to beautify a factory was championed by George Pullman who began planning his company town outside

⁹⁸ Boettiger, *Employee Welfare Work*, 119

⁹⁹The park had been formally opened in 1871. See Holroyd, A. *Saltire and its Founder* (Saltire, 2000). In the 1890s, Salt employed a landscape architect, William Gay to remodel the park. Gay (1814-1893) was best known for his cemetery designs.

¹⁰⁰ See Adelman, W. *Touring Pullman. A Study in Contemporary Paternalism* (Chicago, 1977), p. 1

Chicago in 1880. He appointed an architect, Solon S. Berman and a landscape architect, Nathan F. Barrett (the same duo who had remodelled his house and garden) to integrate the factory and town into a complete functional and aesthetic whole. The combination of design skills undoubtedly contributed to the aesthetic and symbolic impact of the site. Stanley Buder has claimed that this was the first time in American history that an architect and landscape designer collaborated on laying out a whole town and the Boston Herald described it in August 1881 as ‘a professional dream come true’.¹⁰¹ Barrett, whose practice was based in New York, had experience in landscaping estates on Staten Island and in New York State and New Jersey.

In plan, Pullman town is not unlike Saltaire, with its grid pattern of rectangular blocks and the factory situated on one side, slightly separated from the village and surrounded by open space.¹⁰² (Pullman was built on the edge of Lake Calumet.) [Figs. 2.5, 2.6] Both factories were designed to be admired by those passing on the railway, (and the canal in the case of Saltaire). But the Pullman plant was given even greater status by the placing of an artificial lake in front of the factory building, bounded by a serpentine drive, which suggested a country house set in an English landscape garden.¹⁰³ (Lake Vista also functioned as the cooling pond for the great steam engine in the factory and a number of other industrialists were later to exploit the aesthetic potential of their water supply, including the Cadburys.) [Figs. 2.7, 2.8] The tree-lined paths around the lake invited townspeople and visitors to take sedate walks or drives around the lake. The level of sophistication of the landscaping and the suggestion of

¹⁰¹ Buder, *Pullman*, 61

¹⁰² Crawford, *Building*, 37

¹⁰³ Pearson, A. M. ‘Historic Pullman’s *Other Architect: Nathan Franklin Barrett*’ *Illinois Heritage* (2005), 20-5

pleasure garden in the area around the factory makes the scheme innovative from the point of view of this study.

An informal sweep of parkland bounded by roads and intersected with footpaths connected the factory to the town and beyond the hotel lay a more formal garden or small park (Arcade Park). The lushly planted park and traffic islands were a fine example of the power of landscaping and planting to create soft and sensuous effects within a juxtaposition of formal layout with naturalistic planting. [Fig. 2.9] One journalist from the *Mercantile & Financial Times* arriving by train in 1895 described the view as ‘...beautiful beyond description and without a parallel in any industrial centre in America or the world.’ He applauded the ‘...white graveled walks and grassy lawns, studded with green shrubbery and set here and there with beds of bright hued flowers...’.¹⁰⁴ All this was made possible by the six acres of nursery garden and greenhouse that supplied plants for the town landscapes and for the residents.¹⁰⁵ Visitors from around the world flocked to see Pullman and as far away as Prague it was known as the ‘World’s Most Perfect Town.’¹⁰⁶

The Pullman workers were also well supplied with sports grounds, although these were placed out of sight of the factory beyond the town on fifteen acres of ground on the banks of Lake Calumet and on an artificial island. The facilities there were excellent by the standards of the day and the grounds became a popular sporting venue for national as well as local competitors. According to Mrs. Duane Doty who,

¹⁰⁴ Ibid.

¹⁰⁵ Doty, Mrs. D. *The Town of Pullman. Its Growth with Brief Accounts of its Industries* (Pullman, 1893), p. 94. This book was published to distribute to guests attending the 1893 Columbian Exposition in Chicago. The town also had its own icehouse to store ice cut on the lake, (p. 110) and a 140-acre farm fed by filtered sewage, (p. 155). The town would be regarded as sustainable by today’s standards.

¹⁰⁶ Pearson, *Historic Pullman’s*, 25

together with her husband, were Pullman's appointed 'hosts' to the town, the grounds were the most renowned athletic sports venue in the West.¹⁰⁷

Pullman provided his workers with welfare programmes including accident insurance, medical treatment, education, athletic clubs, a company band and social clubs.¹⁰⁸ The level of control was not unlike Saltaire, but Pullman was not a popular man; the workforce bitterly resented the ways that their domestic as well as their working lives were overseen and there were no means for them to communicate complaints to their employer.¹⁰⁹ A drastic wage cut fuelled the strike of 1894. The federal troops were called in to take control, thirteen people died, 53 were seriously injured and 700 freight cars burned.¹¹⁰ After the strike, poor industrial relations continued. When Algie M. Simmons, (who wrote a study of personnel practices) visited Pullman in the late 1890s, he reported '...nowhere have I seen such concentrated hatred against an employer.' More than a third of the workforce chose to live outside the town¹¹¹ because they resented the rules and wished to buy their own homes or rent from another landlord. In 1907, the Illinois Supreme Court ordered the Pullman Company to sell all the non-industrial property in the town.¹¹² The town of Pullman is largely intact (it is now a National Historic Landmark) but the area around the factory is derelict and the lake filled in. **[Fig. 2.10]** The Historic Pullman Foundation is battling to preserve what is left and the park and landscaping outside the hotel remain, although without their former glory.

¹⁰⁷ Ibid.

¹⁰⁸ Crawford, *Building*, 37

¹⁰⁹ Biggs, *The Rational Factory*, 65 and Adelman, *Touring Pullman*, 3

¹¹⁰ Jeansonne and Lührssen *A Time of Paradox*, xxii

¹¹¹ Brandes, *American Welfare Capitalism*, 139

¹¹² Adelman, *Touring Pullman*, 45

Social and urban reform and factory landscapes – 1880s to the 1930s

The Pullman example confirmed to those already skeptical that an overly paternalistic control over the workers' domestic as well as their working lives could end in disaster and even the landscaping had been ridiculed as symbolic of '...the old country-landlord system.'¹¹³ One company, U.S. Steel did not provide parks and recreation grounds or other amenities at their Gary, Indiana plant. Instead, they established an independent development company and sold housing lots to outsiders as well as to their own workers. The result, according to Crawford, was a 'dreary and chaotic industrial city.'¹¹⁴ However, others endorsed the value of good architecture and planning to the industrial landscape, and as Margaret Crawford has argued, the Pullman strike 'initiated a new chapter in [company town] development' and of the 70 planned industrial settlements built in the US between 1900 and 1939, almost all were designed by professionals.¹¹⁵ One of the most visited and discussed company towns in the world, Port Sunlight, was built in the UK in the 1890s. Outdoor amenities were similar to those at Pullman, although on a much smaller scale and initially based in design terms on an English village landscape. The factory had a football ground, rifle range, tennis courts, bowling green and allotment gardens and the villagers could relax in a small informal park.¹¹⁶ Later, a 120-acre recreation ground and an outdoor swimming pool were provided, but the factory itself, an undistinguished building, was not enhanced by landscaping as at Pullman.¹¹⁷

¹¹³ Buder, *Pullman*, quoted in Crawford, *Building*, 43

¹¹⁴ Mohl, R.A. and Betten, N. 'The Failure of Industrial City Planning: Gary Indiana, 1906-10' *American Institute of Planners Journal* (July 1972), 206-15, in Crawford *Building*, 44

¹¹⁵ *Ibid.*, p. 45

¹¹⁶ Plan of Port Sunlight, 1909, PSVT.SV

¹¹⁷ Lever Bros. Ltd. *Employees Handbook* (Port Sunlight, 1930s?), Bodleian Library, M05.E04191

From the 1890s, the professional approach to landscaping industrial towns was matched in the landscaping of factory and office buildings. The use of planting to present the factory in the picturesque image of a rural idyll was adopted as entrepreneurs moved their premises out of the overcrowded towns, or established new plants on the edge of cities. As their businesses thrived, some owners like the Cadburys and John Patterson of the NCR purchased additional land, some for new factory building and some for recreation grounds and housing and provided pleasure gardens, allotments and sports fields within the factory complex, thus focusing the amenities on the factory workers themselves, rather than the local inhabitants. They employed professional landscape engineers and architects to make the most of the available space.¹¹⁸

Some companies went to very great lengths to maintain their gardens by employing a large gardening staff (50 at Cadbury in the 1930s) and building glasshouses to supply plants and flowers for the factory inside and out, carnations for the guides' button holes¹¹⁹ and flowers as gifts to the workforce. It was common for model employers to provide allotments for the workforce, offer classes in gardening and make plants available for sale to the employees.¹²⁰

Landscaping at factories such as Cadbury and the NCR represents an important moment in an analysis of factory gardens and parks when the drive for employee welfare and increasing understanding of the importance of the corporate image,

¹¹⁸ The only evidence found of the involvement of a landscape professional at a factory site in the UJK before the 1890s, is Humphrey Repton at Armley Mill, discussed above, but Repton's brief was not to landscape the mill, but to create a view of house and factory as an aesthetic whole.

¹¹⁹ Meakin, *Model Factories*, 112-13. This was the Parke-Davis Drug Factory at Detroit where the carnations were grown in the directors' hothouses.

¹²⁰ Brandes, *American Welfare Capitalism*, 5

justified the expenditure on professional landscape design. This ‘Factory Beautiful Movement’ was not only driven by welfare reform in the workplace, but was also part of a wider commitment to social and urban reform that was driving the provision of urban parks and gardens in towns and cities.¹²¹ Towards the end of the 19th century and into the 20th, public health policies and public demand for sports drove a shift in park design to provide sports facilities as well as pleasure gardens. Gardens and parks were believed to have redeeming powers and properly managed and controlled, they encouraged respectable behaviour, kept people out of the pub or saloon and improved physical and mental health.¹²²

Industrialists, who, with the nobility (in Britain), were the main patrons of parks, believed that their elevated social and intellectual status should be rightly employed to civilize the working classes.¹²³ They contributed by financing and supporting public parks, but by offering in addition open space at factories that was directly under their control, they believed that they were more able to shape the health, well-being and behaviour of their own workforce and therefore improve their chances of economic success.

There were a number of initiatives to beautify cities in the last quarter of the 19th century, most notably the Kyrle Society in the UK and the City Beautiful Movement in the US, the latter initially associated with Frederick Law Olmsted. The Kyrle

¹²¹ Michael Lang and others have emphasised the profound impact of Ruskin on social and planning reform in Britain and America in the second half of the nineteenth and early twentieth centuries, although Ruskin was disillusioned by the enthusiasm with which industrialists adapted his ideas. See Lang, *Designing Utopia*.

¹²² Conway, H. *People's Parks: the Design and Development of Victorian Parks in Britain* (Cambridge, 1991) and MacGill, L. ‘The Emergence of Public Parks in Keighley, West Yorkshire, 1887-93: Leisure, Pleasure or Reform?’ *Garden History* 35:2 (2007), 146-159

¹²³ Mandler, P., Pedersen, S. *et al. After the Victorians: Private Conscience and Public Duty in Modern Britain* (London, 1994), p. 3.

Society which was formed in 1876 in Liverpool and spread quickly to nine other towns by 1888, aimed ‘to bring beauty home to the people’ by placing works of art in public places like schools and hospitals, and laying out public gardens. (In 1897-8, Liverpool Corporation distributed over 2000 window boxes to working-class districts and presented prizes for the best displays.)¹²⁴ A City Beautiful conference was held in the UK in 1907¹²⁵ but by this time, the Garden City Movement, now burgeoning in the UK and spreading rapidly to the United States, represented by its flagship Letchworth Garden City, was taking the lead in the attempt to improve the urban and suburban environment. The City Beautiful and Garden City Movements’ common aim was to create high status, respectable communities through beauty. In the years before the First World War, other civic organisations like the American Civic Association, founded in 1904 and numerous local civic initiatives, promoted the idea of beauty through landscaping in towns and cities.

The provision of open space became an ideal in social reform and central to urban and then suburban planning policy by the early 20th century with the emergence of the Garden City Movement. Ebenezer Howard in his book that inspired the Movement, *Tomorrow: a Peaceful Path to Real Reform* (1898), had advised building factories around the periphery of the city.¹²⁶ [Fig. 2.11] At Letchworth, the landscaping of factories was an integral part of the planning policy and at Welwyn Garden City, some companies like Shredded Wheat took landscaping seriously.¹²⁷ One of the theories of the Garden City Movement was to build an attractive industrial zone close to the town (not unlike the conception of the first industrial or trading estates like

¹²⁴ Waller, P. *Town, City and Nation. England 1850-1914* (Oxford, 1983), pp. 81-2

¹²⁵ Ibid.

¹²⁶ Subsequently published as Howard, E. *Garden Cities of Tomorrow* (London, 1902)

¹²⁷ Yerbury, F. ‘Thomas Wallis’ Obituary’ *Journal of the RIBA* 60:11 (1952-3), 465-6

Trafford Park, 1898) so that they could be physically and symbolically part of the domestic and social life of the town, but in a defined area.¹²⁸ [Fig. 2.12]

The architect of Welwyn Garden City, Louis de Soissons, who also oversaw the landscaping, designed basic hard landscaping and tree planting into his plans of the sectional factories at Welwyn,¹²⁹ but at some of the larger factories like Shredded Wheat, the landscaping was more elaborate. Factory landscaping was by no means solely the preserve of large companies, for at Letchworth, even the small waterworks plant had a beautiful landscaped garden by about 1920. [Fig. 2.13] Pleasant factory gardens were however the exception rather than the rule. Purdom pointed out in 1947 that the surroundings of the factories at Letchworth were ‘anything but pleasant. Untidiness is common, grass is usually left uncut, and there is created a feeling of carelessness and inefficiency which cannot fail to have a psychological effect.’¹³⁰

While the Garden City Movement continued to be influential on urban planning on both continents, Howard’s garden city model did not endure and instead, suburban development accelerated through the 1920s and 1930s, often along roads (ribbon developments) or arranged as estates or ‘garden suburbs’. In America, ‘new’ non-paternalistic planned industrial communities seemed to be the best solution and many of these were designed using the garden city as a model but without Howard’s more radical proposals such as cooperatives and self-sufficiency.¹³¹ In the UK from the late 1920s, factories tended to be built along or near main roads, like the arterial roads in London (for example the Great West Road, Western Avenue, Eastern Avenue and the

¹²⁸ Purdom, *The Building of Satellite Towns*, 110-1

¹²⁹ *Ibid.*, 292

¹³⁰ *Ibid.*, 129

¹³¹ Crawford, *Building*, 75-6

North Circular).¹³² These new roads provided sites for American companies establishing in the UK like Hoover, Firestone, Beecham, Glaxo and Sanderson.¹³³ Thomas Wallis of Wallis, Gilbert & Partners designed many of these ‘fancy’ factories. Wallis had a personal preference for factory landscapes for their humanizing influence and commercial benefit.¹³⁴ For the approach to the Hoover factory, Wallis designed a sunburst of bedding plants, which echoed the dramatic glazed panel above the door. **[Fig. 2.14]** These bright and clean and factories impressed J. B. Priestley on his travels around the UK in the early 1930s:

These decorative little buildings, all glass and concrete and chromium plate, seem to my barbaric mind to be merely playing at being factories. You could go up to any one of the charming little fellows, I feel, and safely order an ice-cream (sic) or select a few picture postcards. But as for industry, real industry with double entry and bills of lading, I cannot believe them capable of it.¹³⁵

The factories clearly had the desired advertising effect, but as Elaine Harwood and Andrew Saint have pointed out, the ‘lovably fleshy and naïve façades’ of the celebrated factories suggested the superiority of the white-collar workers whose offices faced the main roads while the blue-collar workers were consigned to the rear.¹³⁶

Industrial Welfare and factory landscapes in the 1920s and 1930s

Following the end of the First World War, welfare facilities like dining halls, social clubs and recreation grounds were more commonly built at factories, (see Appendix 2) inspired partly by organizations like the Industrial Welfare Society (IWS) in the

¹³² Harwood, E. and Saint. A. *London* (London, 1991), p. 222

¹³³ For a contemporary account of the Sanderson factory, see ‘A Modern Factory’ *Industrial Welfare* XV (April 1933), 18-21, UW.MRC

¹³⁴ Skinner, J. S. *Form and Fancy: Factories and Factory Buildings by Wallis, Gilbert & Partners 1916-1939* (Liverpool, 1997), p. 22

¹³⁵ Priestley, J.B. *English Journey* (London, 1934), p. 4

¹³⁶ Harwood and Saint, *London*, 231

UK and the National Civic Federation in the US, that campaigned for better welfare provision.¹³⁷ In the UK, some companies modeled themselves on the most famous garden factory, Cadbury. One of these was Montague Burton who built a model factory for his tailoring business in Worsley in Lancashire and named the site Burtonville. He chose Thomas Wallis' practice to design the factory (opened in 1938) because of their reputation for prestige buildings and perhaps due to Thomas Wallis' commitment to landscaping. This state of the art factory was air conditioned and provided piped music to alleviate boredom on the factory floor. More than half the total site was given over to sports fields (slightly encroached upon in 1966 when a new canteen was built) and the owner promoted the family spirit.¹³⁸

The IWS journal, *Industrial Welfare* and their pamphlets *Recreation in Industry. A Guide to Existing Facilities* (1938) and *Factory Gardens* (1955), reveal that a steady stream of companies opened recreation grounds throughout the 1920s and 1930s. These commonly provided football, cricket, tennis and bowls and often putting and golf, with a sports pavilion for changing, refreshments and entertainments and some of these grounds included rest areas planted with shrubs and flowers.¹³⁹ Some companies made gardens around, or adjacent to the administration building or social centre and some had roof gardens, which were valued for rest breaks during working hours.

¹³⁷ In c.1936, the IWS had a membership of approx 750 firms and membership grew to over 1000 by the 1950s. The firm of Cadbury was a champion of the IWS and they paid the largest subscription to the Society of any other firm in the 1930s (approximately 750 subscribers at the time), UW.MRC, MSS HF/1/e

¹³⁸ Skinner, *Form and Fancy*, 214-222

¹³⁹ *Industrial Welfare*, first published in November 1918 as the *Boys' and Industrial Welfare Journal*. Renamed *Industrial Welfare and Personnel Management* in 1929.

Articles in the IWS publications that concern recreation are mostly about sport (*Recreation in Industry* does not mention gardens) but there is sufficient coverage of pleasure gardens in the journal *Industrial Welfare* to suggest that the Society valued such spaces at factories and encouraged them. In issues of the journal between 1918 and 1939, there are at least nineteen reports of gardens at different factories, including one designed in the early 1920s by a member of the IWS for the Fairfield Shipbuilding and Engineering Co Ltd at Govan. (Appendix 2.) The journal illustrates Commander Coote's (a member of the IWS) proposed layout of a garden and recreation ground. [Fig.2.15] The design, which incorporates numerous activities including a pavilion and formal gardens into a relatively small space, is perhaps impossibly overcrowded, for there seems to be very little access space. However, it represents the IWS ideal in number and variety of outdoor activities for employees and their children.¹⁴⁰

In America, the increasing numbers of industrialists who commissioned the Olmsted firm to landscape their buildings, (Appendix 2) is an indication of demand for aesthetics and welfare facilities, although the evidence suggests that the landscaping focused on the office buildings and club houses. The Solvay Process Company (Soda-Ash) in Syracuse New York was one such company. Plans for their administration grounds in the Olmsted archive suggest a sizeable landscaped park with extensive lawns, trees and shrubs with tennis courts, a guild hall and women's dormitory. The factory must have been nearby since notes on the planting plan point out that the plants chosen are 'specially qualified to withstand the adverse circumstances incident

¹⁴⁰ IWS 'Proposed layout of Recreation ground of the Fairfield Shipbuilding and Engineering Co Ltd Govan, designed by Commander Coote of the Industrial Welfare Society' *Journal of Industrial Welfare* III: 2 (Feb 1921), p. 63, UW.MRC

to the injurious gases from the factory.’¹⁴¹ This suggests that even in polluted areas, landscaping and the survival of plants were possible and beneficial.

Due to the Great Depression after 1929, it was suspected that social and recreational activities had retrenched and this was confirmed by a survey of industrial- relations activities conducted in 1934 by the National Industrial Conference Board and J.E. Walters from Purdue University. Responses were received from 233 firms which confirmed a considerable reduction of social and recreational activities, but *with the exception* of athletic activities which ‘were fairly well maintained, and employee clubs and company gardens were generally continued.’¹⁴²

In 1938, once the Depression was easing and before War was to impose yet another national crisis, recreation was put firmly back on the agenda with the founding of the Society of Recreation Workers of America (later the American Recreation Society) to raise standards in the field of recreation. With war looming recreation was seen as a vital factor in the upkeep of worker morale and the Industrial Recreation Association was founded in 1941 to oversee and extend worker recreation programmes.

In Britain and America between the Wars, a factory garden movement was firmly established in theory and in practice. The discussion that follows and subsequent chapters will show how these spaces were promoted in published sources and in lectures and films to embed the idea into industrial planning. By the 1950s, the factory garden was becoming an inclusive part of the discourse of industrial architecture and

¹⁴¹ Solvay Process Co., FLO.NHS, plans 00077, 77-5; 77-11; 77-12

¹⁴² National Industrial Conference Board ‘What Employers are Doing for Employees’ *Studies* 221 (New York, 1936), 5-21, quoted in Anderson, J. M. *Industrial Recreation. A Guide to its Organization and Administration* (New York, Toronto, London, 1955), pp.62-3

planning.¹⁴³ Recreation grounds for sport were provided for employees in increasing numbers between the Wars and the contribution of industry to the demand for sports provision was significant. Factory sports, particularly at larger factories, became the norm after the Second World War.

The major case studies: introduction

This section introduces case studies, which are firms that landscaped their factories from the 1890s onwards. Further case studies can be found in Appendix 1. Cadbury, the NCR and the Natural Food Company (renamed Shredded Wheat in 1913) at Niagara Falls set important precedents in the provision and design of factory gardens and recreation grounds and set a standard of landscaping by which future ‘model’ and ‘modern’ factories were judged. Cadbury (and Rowntree, see Appendix 1) made designated gardens for their female employees and the NCR also had recreation space for women. The NCR, Cadbury and Rowntree made allotment gardens for the children of the workforce and other local residents. The NCR factory, the Natural Food Company at Niagara Falls and to some extent the Cadbury factory set themselves up as models of good gardening practice, provided gardening education and sold seeds and plants to locals from their gardening departments.

The gardens and recreation grounds of the next two case studies, the Spirella corset factory at Letchworth and Shredded Wheat at Welwyn reflected ideals in factory planning in the 1920s, based on principles of modern welfare capitalism and an understanding of the power of the factory image in advertising. These were factories

¹⁴³ Verulam and Youngman, *Factory Gardens* and Mills, E. D. *The Modern Factory* (London, 1951). Republished as Mills, E. D. *Factory Building* (London, 1967). This version has a separate chapter on landscaping for industry written by Susan Jellicoe. In 1964, an exhibition ‘Industry and Landscape’ was held at the Institute of Landscape Architects.

established in garden cities and so they represent the relationship between factories and progressive planning theory at the time.

The physical relationship between the sports grounds and pleasure gardens at the factories varied depending on available space, and the inclinations to gardens of the industrialist. The most sophisticated arrangements were at factories like Cadbury, the NCR and Spirella, which had pleasure gardens adjacent to the factory as well as additional pleasure gardens incorporated into the sports grounds.

The factory pleasure garden was not exclusively a lawned area adjacent to the factory, but was sometimes made on the factory roof. This might be where spare land was scarce, or was created as an additional feature of the factory, as was the case at the Spirella factory. Meakin recommended making use of the roof for recreation by having them flat with glass paving shaded by awnings and these, he said, were particularly valuable when dining rooms might open onto them. He illustrated the roof garden at the Heinz factory in Pittsburgh, which had separate walks for men and women, 170 x 100 feet each, with plants in pots, fountains and creepers on the walls.¹⁴⁴ Features in the roof garden included a music room with an organ for dances after lunch. In the photograph in his book, the garden also appears to have flowerbeds and an ornamental fountain as well as a pavilion topped by a finial. The Jacobs biscuit factory in Dublin and the Natural Food 'Conservatory', 'one of the picture spots of Niagara', also had roof gardens.¹⁴⁵ The Cream of Wheat Co, built in 1903-4, which was said to resemble a concert hall or conservatory rather than a factory, had an

¹⁴⁴ Fairman, L. *The Growth of a Great Industry* (Pittsburgh, c.1900)

¹⁴⁵ Meakin, *Model Factories*, 94-5

Italian-style pleasure garden and a roof garden over the engine room.¹⁴⁶ The flat roof became one of the signatures of modernist architecture¹⁴⁷ and roof gardens were designed as part of the aesthetic and functional whole. Some architects saw roof gardens as necessary in high-density urban developments. Frank Lloyd Wright incorporated rooftop conservatories and terraces for employees and guests into the design of his highly influential administration building for the Larkin Company in Buffalo, New York (1904),¹⁴⁸ and he included roof gardens in his Chicago and New York skyscraper projects in the 1920s.¹⁴⁹ The Unilever building in Rotterdam, designed by H.F. Mertens (1930) had a large, paved garden on the flat roof with raised ornamental flowerbeds of the kind that Frank Lloyd Wright and Le Corbusier would have deplored.¹⁵⁰

By the 1920s, on both continents, factory landscapes were common, more often in the form of recreation grounds, or as basic landscaping to beautify the factory, but in a number of notable cases, factories had pleasure gardens either beside the factory, or on the roof, or had gardening clubs on factory-sponsored allotments. According to architects, engineers and social theorists, recreation grounds and cosmetic landscaping were essential attributes of the larger model, or modern factory, and pleasure gardens were desirable. The provision of recreation and garden spaces ran broadly parallel in Britain and America although after 1900, American firms opening plants in Britain like the Spirella Corset Company, the Natural Food Company (Shredded Wheat) and

¹⁴⁶ Hunter Bradley, *The Works*, 207

¹⁴⁷ See for example Le Corbusier *Towards a New Architecture* (London, 1986)

¹⁴⁸ The conservatories contained palms, ferns, vines and aquatic plants. See Quinan, J. *Frank Lloyd Wright's Larkin Building: Myth and Fact* (Chicago, 2006), p. 108, p. 150, p. 157

¹⁴⁹ Aguar, C.E. and B. *Wrightscapes. Frank Lloyd Wright's Landscape Designs* (New York, London etc., 2002), p. 221. Roof gardens were constructed on department stores and other commercial buildings in the 1920s and 1930s including Selfridges, London, completed in 1928, the Rockefeller Centre in New York (1935), and Derry & Toms in Kensington High Street, London (1938).

¹⁵⁰ Bucknell, *Industrial Architecture*, 43

Heinz were prominent in the 'Factory Beautiful Movement', which perhaps reflected their relative wealth as much as their commitment to gardens and parks. The British at this time did not have a fully-fledged landscape profession to champion the cause of industrial landscapes, so it was down to the personal commitment of client, architect or engineer to landscape the factory.

The Cadbury Chocolate Factory, Bournville, Worcestershire¹⁵¹

In 1879, George and Richard Cadbury moved their works from the centre of Birmingham to a new rural site of fourteen and a half acres to the south west of the city, on the banks of the Bourn stream and with a station and canal nearby. From the start, the brothers tried hard to mitigate the effects of industrial development on the environment by emphasising their conservational approach to the site. They named the site Bournville, preserved Bournbrook Cottage (known as Mrs Duffield's Cottage), which for a few years remained within the works premises¹⁵² and built housing nearby in the image of a traditional village, with gardens, greens and other community amenities. The brothers were aware of the sensitivities of suburban development and of the potential harm to the company's image of environmental damage. Complaints were made by at least one local who claimed that the factory was polluting the Bourn Brook.¹⁵³

The first factory buildings were relatively undistinguished architecturally. Early reports and images show more interest in the green space around the factory, which included a sports ground for the men, and a small playground with swings for the

¹⁵¹ Bournville is now part of the West Midlands.

¹⁵² Rogers, T. B. *A Century of Progress 1831-1931. Cadbury Bournville* (London, 1931), p. 42

¹⁵³ See George Cadbury 'A Great Housing Experiment' *The Municipal Journal* 10 (22 March 1901), p. 208, quoted in Hoffman, 'Imaging the Industrial Village', 21

women - ‘a cultivated garden for rest and recreation’.¹⁵⁴ [Fig. 2.16] But in 1895, seventeen years after the initial foundation, the brothers bought the neighboring estate, Bournbrook Hall, which provided the perfect opportunity to situate the factory in an Arcadian setting. [Fig. 2.17] The acquisition of Bournbrook Hall and its landscape was a popular move.¹⁵⁵ This new land provided the factory with 26 acres of recreation space for men and women, which was a much larger proportion of open space to buildings. By 1902 the architect, Henry Bedford-Tyler (1871-1915) had built a pavilion overlooking the Men’s Recreation Ground, a half-timbered turreted fairy-tale ‘schloss’, and a picturesque wooden bridge was constructed over Bournville Lane between the Men’s and the Girls’ Grounds (the former gardens of Bournbrook Hall).¹⁵⁶ These structures gave a sense of drama to the factory approach and provided additional safe access for the more sporting, theatrical and social events for which the Girls’ Grounds became renowned. [Fig. 2.18] The open space around the offices was landscaped with lawns, trees and flowerbeds and trellises placed along the paths which approached the men’s and the women’s entrances to the factory. [Fig. 2.19]

For twelve years, the firm lodged female workers in Bournbrook Hall and made a private access to the grounds by means of a tunnel built under the road from the girls’ playground and they added a sports pavilion and cycle shed. (In the 1920s, when the new dining block was completed, a second tunnel to the grounds was constructed. The tunnels are still there, but not used.) By this time, the firm was beginning to build more architecturally distinguished buildings that added to the cultural capital of the

¹⁵⁴ Cadbury, E. *Experiments in Industrial Organisation* (London, 1912), pp. 221-2

¹⁵⁵ One employee, W. Pickard remembered the enthusiasm that greeted the acquisition of Bournbrook Hall and its land in 1895. ‘Personal Reminiscences’, CB, 000 003270

¹⁵⁶ The bridge was taken down in the 1970s.

site, like the men's pavilion and the state-of-the art indoor swimming bath for the girls, designed by the firm's architect, George Lewin and opened in 1904.¹⁵⁷

In 1907, the firm employed a Quaker firm of garden architects, Cheals of Crawley to give the Girls' Grounds a complete makeover. The Hall and most of the stables were demolished (now surplus to requirements due to an increasingly available local workforce and improved public transport) and the garden remodelled in an Arts and Crafts style, including a lily pond, tennis courts and pavilions. **[Fig. 2.20]** The old summerhouse, which had been often used as a photo spot, but which must by now have seemed old fashioned or quaint, was taken down and replaced by a large pergola and steps which performed a triple function of defining the entrance to the garden from the factory, providing a refuge from which to view the landscape and as a stage for theatrical performances. The design of the Girls' Grounds will be discussed in more detail in Chapter 3.

The kitchen garden of the old Hall continued to supply flowers for the factory and fruit for the workforce, but the facilities for the Gardening Department were greatly enhanced in the early 1920s by the addition of a large potting shed and tool store (later a mess room was added) followed by a set of brand new glasshouses. The Victorian greenhouses were replaced by Messenger & Co. Ltd, of Loughborough, 'specialist horticultural builders, hot water engineers and iron founders'. The plans show six greenhouses, including a large palm house and a carnation house, with the addition of numerous cold frames. **[Fig. 2.21. See also Fig. 1.6]**

¹⁵⁷ See 'The Girls Baths' *BWM* 4:1 (November 1905), pp.5-8, CB. Swimming pools at factories were rare although bathhouses common in philanthropic plants. The Cadbury men had an open-air bath at the far side of their grounds.

After 1919, the recreational facilities at Bournville were augmented by yet another purchase of land, some 100 acres at Rowheath, half a mile south of the factory.

Between 1924 and 1937, pleasure gardens, sports grounds, a fishing lake, a bowling green, two bandstands, a lido and a grand pavilion with restaurant were created at Rowheath.¹⁵⁸ **[Fig. 2.22]** Rowheath Park will be discussed further in Chapter 6.

In commemoration of the Firm's centenary in 1931, a formal garden with pool and fountain was constructed between the terrace of the new dining room block (completed in 1927) and the Men's Recreation Ground. As an acknowledgement of appreciation for all the benefits given to the workforce over the years, the employees presented a statue for the fountain, of the goddess Terpsichore, the muse of dance and the dramatic chorus. **[Fig. 2.23]**

The Cadbury grounds even today provide a pleasant green setting for the factory and offices and symbolically identify the workforce and their needs as the main focus of interest when arriving at the plant. The other factories of the Cadbury firm at home and abroad also had gardens including those of the Moreton Factory (which also had a lily pond)¹⁵⁹ and Fry, the firm taken over by Cadbury in 1919. These gardens have not been researched.

The National Cash Register Company (NCR), Dayton, Ohio

The success of the Cadburys in creating a factory arcadia was matched in the US by John H. Patterson. In the mid 1890s, following the return of the faulty cash registers

¹⁵⁸ Beauchampé, S. and Inglis, S. *Played in Birmingham. Charting the Heritage of a City at Play* (Birmingham, 2006), p. 38

¹⁵⁹ 'Cadbury's factory in a garden at Moreton', CB, 030 000041

mentioned above, Patterson began to make improvements in the factory and to Slidertown, the run-down neighbourhood adjacent to the factory. In October 1895, Patterson called in from Boston the leading landscape architects of the day, Olmsted, Olmsted and Eliot.¹⁶⁰ [Fig. 2.24] The Olmsted firm was a good choice since their patriarch, Frederick Law Olmsted had believed passionately in the moral value of gardens but thought that a design of the Pullman type was too prescriptive and controlling, imposing ‘ugly and monotonous geometric patterns on nature’.¹⁶¹

John Patterson was typical of Progressive industrialists at this time, many of whom were ardent supporters of the City Beautiful Movement and interested in social reform through housing development and access to open space.¹⁶² By 1918 he was a member of the American Civic Association, The National Civic Federation, the Civic Forum and the School Gardens Association¹⁶³ and he and his officers gave regular lectures locally and nationally on subjects such as civics and the benefits of gardens, illustrated by his example at the NCR and Dayton. However, Patterson was also vastly ambitious and a zealot, not only in building a profitable corporation, but in setting an example to the world in such matters as welfare and health to improve people’s lives and enrich themselves, but above all to make them more efficient, kept in perfect shape and under control. John Patterson epitomized the extreme position of

¹⁶⁰ The Olmsted Firm underwent several name changes after Frederick Law’s retirement in 1895 - F.L. Olmsted and Co. 1889-93; Olmsted, Olmsted & Eliot 1893-97; F.L. & J.C. Olmsted 1897-98; Olmsted Brothers 1898-1961. See Klaus, S. L. ‘All in the Family: The Olmsted Office and the Business of Landscape Architecture’ *Landscape Journal* 16:1 (1997), 80-95

John Charles was largely responsible for the NCR work, but in July 1904, when Patterson’s landscaping ambitions began to extend to the land beyond the factory and to his own garden, he requested that both brothers should visit the site.

¹⁶¹ Buder, *Pullman*, 71

¹⁶² Stanley Buder has argued that the idea of factory villages in the suburbs and providing workers with a model environment was revived in the early 20th century, an idea that had lost its way since the Pullman strike of 1894. These ideas were promoted by the National Civic Federation (to promote industrial housing) and the American Garden City Association, founded 1907, to promote better housing and community services. Buder, *Visionaries and Planners*

¹⁶³ ‘List of New York Clubs and Associations to which Mr John Patterson belongs’, NCR.DH

the body as a machine – he gave his workforce distilled water to drink, started the working day with calisthenics for ten minutes in each office and compelled senior management to accompany him on horseback for early morning rides. He promoted his company parks as aids to health, not to pleasure.¹⁶⁴ His treatment of his own body was no less than fanatical for as an experiment he fasted for 30 days and drank only water, a regime from which his health never fully recovered. His motives were not those of a philanthropist, for his slogan ‘It Pays’ emphasised the economic motivations of his measures. **[Fig. 2.25]**

Patterson’s choice of the Olmsted firm was typical of his outlook. He had seen the work of Frederick Law Olmsted and his sons at the Chicago World’s Colombian Exposition in 1893 (John Charles, Frederick’s son and the young Frederick, his stepson, had both worked on this project) and knew their formidable reputation as the leading landscape architecture firm in the US. The Brothers’ partnership was eleven years old in 1906, (their father retired in 1895) but John Charles had already had 23 years of experience in the firm (his step-brother, Frederick had left college four years previously). John Charles had also been appointed the first President of the American Society of Landscape Architects on its foundation in 1899 and both brothers were active in the American Civic Association which was dedicated to improving the environment and promoting beauty, particularly in the making of urban, country and then state parks and in the beautifying of cities through design and planting.¹⁶⁵

Olmsted had also already been involved in several major park projects, for example, the Seattle and Chicago Park systems from 1903, so Patterson could be confident that

¹⁶⁴ Allyn, S.C. *My Half Century with NCR* (New York, 1968), p. 16, p. 26

¹⁶⁵ Young, T. ‘Social reform through parks: the American Civic Associations’ program for a better America’ *Journal of Historical Geography* 22:4 (1996), 460-471

this was the man for the job. (The Olmsteds and their associates eventually designed a complete park system for Dayton.)¹⁶⁶

With the benefit of the Olmsted's advice, Patterson renamed the area 'South Park', provided incentives and advice to local people on how to beautify their homes with gardens and began to provide facilities for his workforce at a level of sophistication that was innovative or at least rare in factories at the time. These included an insurance association, a medical department, baths, a dining area and rest rooms, library and reading room, Sunday school, choral societies, musical groups, a theatre, a kindergarten and a number of other clubs.

As well as the problems within the factory, local youths had been running wild and breaking the factory windows and Patterson believed that if they could be tamed with the redeeming effects of horticulture, they might make suitable workers for the future.

In 1897 Patterson opened the 'Boys' Garden' at the works to teach the necessary skills to the younger generation and keep them out of trouble.¹⁶⁷ **[Fig. 2.26]** Although take up was slow at first, cash incentives and peer pressure (and no doubt parental pressure) saw that the gardens were productive and Patterson and his supporters celebrated them as one of his most significant achievements. (By 1919, nearly 800 boys had been trained in the gardens.¹⁶⁸) To increase incentives and teach them management skills, the boys were allowed to run their own garden company, each year they were invited to a formal dinner at the Officers' Club at which prizes were

¹⁶⁶ The Olmsted Brothers were also engaged on developing a plan for the complete park system of Baltimore at this time. Frederick Jr. and P.R. Jones managed this job and there was some initial tension between the city's desire for recreation grounds and Olmsted's preference for quiet scenic spaces. See Kessler, B. and Zang, D. *The Play Life of a City: Baltimore's Recreation and Parks 1900-1955* (Baltimore, c.1989)

¹⁶⁷ Gilman, *A Dividend to Labor*, 230

¹⁶⁸ 'C.C. Feicht Says' *NCR News* VI: 1 (July 1919), p.36, NCR.DH

awarded¹⁶⁹ and they produced their own booklet about the gardens. The NCR also opened gardens for the local girls supervised by the same man who looked after the boys, although these gardens were smaller and a further from the factory. Any girl was eligible but employees' children were given preference.¹⁷⁰ (The company also opened an Officers' Club garden to supply produce for the officers' dining room and a men's allotment garden.) Local children were also encouraged to garden at home. In September 1904, it was announced in the company magazine, *The NCR*, that four local children had won a trip to the St Louis World Fair for the best-kept window boxes and yards in South Park.

The Olmsteds continued to work for the firm, making several visits in 1904 and 1905 to advise on a new design for the Boys' Gardens and advising on a new design for land to the south of the factory to improve the sports and recreation facilities. (By November 1904, the NCR employed 3,400 men and 600 women.) [Fig. 2.27] The NCR journal revealed that visitors to the factory were numerous and the Olmsteds recommended that the Boys' Gardens be made more attractive and paths widened.¹⁷¹ In the years that followed, the NCR recreation grounds were provided with a landscaped lake with island, open air gym, tennis courts and athletic field for the women, all naturalistically landscaped. Then the company added a grandstand with swimming tank underneath, a baseball diamond, football field and running track and men's outdoor gymnasium.¹⁷² The Olmsteds contributed respectability and beauty to the women's club by the addition of a vine-clad pergola that connected their dining

¹⁶⁹ Menu of Annual Dinner and Distribution of Prizes to the Boy Gardeners at Officers' Club November Two (sic) 1904, 6 pm, NCR.DH

¹⁷⁰ 'What Can A Girl Do' *NCR News* 2:5 (November 1915), p.11, NCR.DH

¹⁷¹ Letter from Olmsted Brothers to NCR Building Committee, 1 August 1905, LC.MD.OAR, Series B Reel 20

¹⁷² FLO.NHS, 00280. Plan 280-122. See also 'Athletic Field To Be Enlarged' *The NCR*. XVII: 4 (September 1904), p.181, NCR.DH

room to the dormitory.¹⁷³ At times, commercial demands over-ruled aesthetic ones. In 1907, Olmsted persuaded Patterson to make an ‘English Garden’ outside one of the offices, which included an ornamental fountain surrounded by paths and an evergreen shrub at each corner. The life of this garden was short because by 1911, a new convention hall was built on this site, much to the annoyance of the landscape architect.¹⁷⁴

In 1905 the Olmsteds started to landscape a much larger tract of land to the north of the factory, Hills and Dales Park (513 acres), some of which was made available for the workforce in 1907 and which soon after was opened to all local residents. In 1937, the Olmsted firm designed a new company park adjacent to the factory, Old River. These two parks will be discussed further in Chapter 6.

The Natural Food Company (Shredded Wheat) Niagara Falls and Welwyn Garden City

Henry Perky founded the Natural Food Company, (which became the Shredded Wheat Co. in 1913) in Roxbury Massachusetts in 1894 and soon afterwards he moved the factory to Worcester. By 1895, the company was expanding fast and attracted by the power at Niagara Falls and by the marketing opportunities presented by this popular and dramatic natural wonder, Perky decided to move to the new industrial area.¹⁷⁵ Perky chose a prestigious site of ten acres on Buffalo Ave, in the best residential district overlooking the Falls, far from the industrial area. The locals were horrified. To restrain local opposition to his plans, he announced his intention to build

¹⁷³ 00280 Plan 280-112, 15 September 1904, FLO.NHS.

¹⁷⁴ Letters between Colonel Deeds and Olmsted Brothers June and July 1911, LC.MD.OAR, Series B Reel 20

¹⁷⁵ Although as William Irwin has pointed out, by 1900 the industrial area at Niagara was large, ugly and polluting. *The New Niagara. Tourism, Technology and the Landscape of Niagara Falls 1776-1917* (Penn State University, 1996), p. 186

‘a show factory – a temple of cleanliness to house the purest and cleanest of foods’.¹⁷⁶

The Niagara Falls Gazette proclaimed that the ‘famous features’ of the NCR factory at Dayton would be reproduced¹⁷⁷ and the coming development would be like a:

Crowning triumph for Niagara Falls, It sounds like a dream, Reads Like a Fairy Tale, Seems too good to be true \$10,000,000 company decides to locate here.

Perky chose the Norcross Brothers, a prominent firm of Boston builders to design and build the factory, which he called the ‘Palace of Light’,¹⁷⁸ [Fig. 2.28] and the first shredded wheat biscuit was baked there in May 1901. The factory, of modern steel frame construction costing over \$2,000,000, was fully air-conditioned and the large windows overlooked the Niagara River. The building and its landscape were designed to impress, to reassure and to symbolise a link between healthy eating, model working conditions and social reform. To reinforce the message, the building was known as ‘the Conservatory’. Perky boasted that the Natural Food Conservatory ‘provided a beautiful place for employees work in...probably the most rational scheme of social and moral betterment that may be found in any factory in this country.’¹⁷⁹ [Fig. 2.29]

One visitor to the factory in 1906, a Mr Joseph Newton Hallock, recorded his impressions in *The Christian Work and Evangelist* magazine. A ‘high-speed’ elevator took him to the roof of the factory, where he enjoyed the ‘pure invigorating air from over the Niagara rapids.’ He described the view of ‘beautiful lawns’ and the ‘pure

¹⁷⁶ Cahn, W. *Out of the Cracker Barrel; the Nabisco Story, from Animal Crackers to Zuzus* (New York, 1969), pp. 207-223

¹⁷⁷ Irwin, *The New Niagara*, 188

¹⁷⁸ The building was demolished in 1952. Irwin, *The New Niagara*, 22

¹⁷⁹ Cahn, *Out of the Cracker Barrel*, 214

atmosphere between the great factory and the wide river'¹⁸⁰ that was managed by the company Landscape Department.

The property included all the land between the factory and the Niagara River and the company bought adjacent land to prevent interference from other companies.¹⁸¹

Photographs, illustrations and contemporary accounts suggest that the grounds surrounding the factory were essential to its image. William Irwin states that the landscaping of the factory and administration buildings was designed by the Olmsteds, but without reference to any plans¹⁸² (The Olmsted firm landscaped much of the residential and park land at Niagara Falls.) In March 1901, Perky wrote to the Olmsted Brothers seeking their advice on the landscaping of a domestic science school and a club, adjacent or near to the factory. Following a visit soon afterwards, the Olmsteds provided plans and a written grading and planting specification. In July, John Charles Olmsted met with Perky to discuss the landscaping of the factory and of his own residence, but Olmsted's memorandum following the visit suggests that Perky was too busy to give the project his full attention.¹⁸³ However, there are grading plans for the Conservatory in the Olmsted Archive dated March and April 1902 and these, together with illustrations of the factory suggest that the landscaping, of ten acres, was carried out to the Olmsteds' specifications.¹⁸⁴ Extensive lawns planted with trees and shrubs are bounded by a curving drive that prolongs the approach to the impressive factory entrance. The landscape was clearly designed for both active and

¹⁸⁰ Ibid.

¹⁸¹ Hallock, J.N. *The Christian Work and Evangelist* (Nov 24th 1906), p. 673, KA

¹⁸² Irwin, *The New Niagara*

¹⁸³ LC.MD.OAR, Series B Correspondence files

¹⁸⁴ FLO.NHS, 00066, Perky, Henry D.; Niagara Falls; New York; 07 Private Estate & Homesteads; 8 PLANS (1901-1902). These plans were not seen.

passive recreation for it included sports grounds, a public playground, allotments and seating in quieter areas.¹⁸⁵

The Olmsted's influence on the Natural Food Company extended beyond his landscape design. Perky had visited the NCR where the landscapes and gardening practices had been shaped by the Olmsted firm. According to the NCR welfare secretary, Lena Harvey Tracy who subsequently visited the Natural Food Conservatory, Perky copied all the NCR welfare ideas to the tune of \$90,000.¹⁸⁶ (Perky also head-hunted one of the NCR managing engineers, Edward A. Deeds.¹⁸⁷) This included presenting the factory as a model of good gardening practice in the neighbourhood. As will be seen in Chapter 3, the Natural Food Company's gardening publications were almost identical to those at the NCR and they included the Olmsted signature planting advice.

The Shredded Wheat Company, which was phenomenally successful, soon opened further plants; one on the Canadian side of the Falls, in Erie Ave, Ontario, one in Oakland California and one in Welwyn Garden City, UK, which, like Niagara Falls, was a new town in an attractive environment and based on forward-looking principles. The Shredded Wheat factory at Welwyn (1925) was very similar to the plant at Niagara Falls in its visual impact and amenities, although the architect, Louis de Soissons had been more adventurous than the Norcross Brothers in his use of architectural language and metaphor. Both factories were distinguished by a sweeping drive up to the front door, in the image of a country house, but de Soissons had mixed

¹⁸⁵ Irwin, *The New Niagara*, 193

¹⁸⁶ Tracy, L.H. *How my Heart Sang. The Story of Pioneer Welfare Work* (New York, Richard R. Smith, 1950), p. 155. Tracy quotes from a letter from the Eastman Kodak Company which also credits the NCR as a role model in welfare, p. 156

¹⁸⁷ Irwin, *The New Niagara*, 188, 198

his metaphors, for the approach to the Welwyn factory was designed in the image of an American mansion or ranch with grain silo attached. Visitors arriving at the factory would drive or walk through the Folly Arch and sweep up a tree lined avenue (poplars?), passing the football field, cricket pitch and tennis courts on their left before arriving at the grand entrance which was soon embellished with lush plantings of shrubs. De Soissons, a proto-modernist, also exploited the soaring aesthetics of American and Canadian grain silos to produce an industrial building that proclaimed its purpose, celebrating industrial prowess but in the image of a modern palace to industry that was forward-looking and desirable. De Soissons' Canadian origins and his Paris education might have contributed to the design of the building for it is possible that he had read Le Corbusier's *Vers une Architecture* when it was published in Paris in 1923, in which the author celebrates the architectonics of grain silos.¹⁸⁸

[Fig 2.30] The white-tiled cladding, large windows and landscaping also contributed to this image. Newspaper reports at the time described the building as a palace of crystal in reverence to that great mid 19th century icon of industrial prowess. They marvelled at the huge walls of glass held together by slender white-tiled columns of concrete.¹⁸⁹

There are no records other than photographs and illustrations of the landscaping, but it was almost certainly designed by de Soissons who oversaw all the landscaping of Welwyn with the help of the local Digswell nurseries who supplied plants, planting plans and labour to the public and no doubt also to the many private areas of

¹⁸⁸ The book was first published in English in 1927 as *Towards a New Architecture* (London)

¹⁸⁹ Filler, R. *A History of Welwyn Garden City* (Chichester, 1986), p. 131

Welwyn.¹⁹⁰ The factory landscape, with its tree-lined drive, became a vital component in the Shredded Wheat advertising that will be discussed in Chapter 7.

The facilities and amenities for staff for rest and recreation were very similar to those at Niagara Falls and included sports grounds and gardens, (including three hard tennis courts), a visitors' room in colonial style with potted plants very much in evidence, and staff recreation and dining rooms (a free mid-day meal was available to all).

Within three years, the factory had become a popular destination for visitors with 12,000 - 15,000 visiting per year, (although these were tiny numbers by comparison with the Niagara Falls plant).

Much of the garden and the sports ground in front of the factory were lost when a second set of silos was built in 1939 (the company was by now processing 400 tons of wheat per week). The remaining garden was re-landscaped but this also was sacrificed when the factory was extended in late 1950s. By this time, buildings covered the entire site and the silos were obscured from the road. Company paternalism was now in decline and the social welfare facilities gradually bowed to the entertainment facilities that were increasing available in the town.¹⁹¹ All that is left of the landscaping now is a row of poplars on the perimeter of the site.

The Spirella Corset Factory, Letchworth Garden City

The Spirella Corset Company was founded in a town centre factory in Meadville Pennsylvania in 1904 to manufacture corsets made on the new 'spiral stay' principle

¹⁹⁰ Digswell Nurseries, Welwyn, Board, Committee and General Meetings minutes, register of members, share ledger (1921-50), HL. D/EFfB45

¹⁹¹ Butterfield, R. 'The Shredded Wheat Factory at Welwyn Garden City' *Industrial Archaeology Review* XVI:2 (Spring 1994), 196-213

(a wire construction instead of the traditional bone stay) a system that due to the flexibility, comfort and durability of the stay, ‘revolutionized’ the corset industry. (An estimated 40 million corsets were produced in the United States alone in the early 1900s.¹⁹²) From the start, the company had a strong welfare policy and each employee belonged to the Spirella Welfare Association that provided educational and recreations facilities. There was no garden at the factory, but indoor physical training was popular and the employees could take advantage of one of the several parks in Meadville for company sports. The company moved to Niagara Falls between 1911 and 1917, where a small plant already existed (built in 1908) and where the founder, W.W. Kincaid, kept a model farm (a small operation remained in Meadville until 1929). Niagara Falls had become a popular industrial area since the power from the falls had been harnessed and the Spirella Company took advantage of its reputation and built a large model factory on the New York side of the Falls and another on the Canadian side. A report on the Canadian factory in the *Daily Record* of 9 March 1911 suggests that the building was attractively landscaped with lawns, flowers and shrubs, ‘thus making it one of the most beautiful spots in the city.’¹⁹³

In 1910, the Spirella Company opened a British operation in Letchworth Garden City, UK, initially in a small and undistinguished factory, but within two years a new factory, which became known as ‘Castle Corset’ was built close to the centre of the town (1912-22). **[Fig. 2.31]** By the early 1930s and quite possibly earlier, the company opened its own sports ground nearby. The choice of site was unusual to the overall conception of the Garden City since the industrial area had been planned on the edge of the city near the railway line, but the Corporation must have been

¹⁹² *Meadville Tribune* (11 March 1987)

¹⁹³ ‘The Spirella Co.’ *Daily Record* (9 March 1911) Historic Niagara, Digital Collections, Niagara Falls Public Library (<http://www.nflibrary.ca/nfplindex/results.asp>, accessed 26 June 2006)

persuaded by the ambitions of the company to build a factory of distinction in a very prominent position. The architect was Cecil Hignett, who designed the factory in Edwardian freestyle and the design was also informed by the latest ideas on the 'Daylight Factory' being developed in the US. The building had large double height windows similar to its sister factory at Niagara Falls in the US which was being built at the same time. (The Letchworth Factory is now listed, Grade II). The top floor of the building included a magnificent ballroom with a sprung dance floor (still there and available for hire) with doors onto a substantial roof garden. Additional amenities included a dining hall, library, baths, health centre and the nine-acre sports ground complete with pavilion.¹⁹⁴ Illustrations in the Spirella Silver Jubilee brochure of 1910-1935 show large and dignified interiors, including the front entrance hall furnished with cane chairs and a large flowing plant on the table.¹⁹⁵ By 1935, visitors were received in elegant salons embellished with palms and flowering plants and customers were fitted in modern rooms with tubular steel furniture.

The factory was placed to make the most of the landscape, for the building was set back from the road and at least by 1931 and perhaps earlier, an elaborate Renaissance-style garden was made. No records have yet been found to reveal the designer of the Spirella gardens but it could have been Hignett himself, or his office, for there is a relationship in layout and proportion to the design of the building, in true Reginald Blomfield style.¹⁹⁶ Initially, the formality of the planting and the hard landscaping emphasised the classical aspects of the building, but by the 1940s, the ivy that had

¹⁹⁴ *Silver Jubilee 1910-1935*, FGCHM, 466.7

¹⁹⁵ *Ibid.* p. 44

¹⁹⁶ Blomfield, R. *The Formal Garden in England* (London, New York, 1892) The book went into many editions and became the leading manual on the Renaissance garden.

been allowed to grow all over the building had softened the hard profile and brought out the building's English vernacular, more picturesque aspect.

The U-shaped factory with imposing hipped roofs, huge arched windows and formal garden was much celebrated by the company and by the Garden City Corporation for which it symbolised the success of combining industry with ideal residential conditions. The factory was presented on a postcard of 1920 as 'Not a country house, but a corset factory' and the company adopted the Cadbury slogan of 'The Factory in a Garden' in their publicity material. The building in its formal garden distinguished the factory above all others in the area and probably all factories already known by the workforce many of whom came from surrounding villages. On the company's 21st birthday in 1931, a huge ceremony was held in which the garden played a central role and so the formal garden became a key symbolic element in the company's success.¹⁹⁷ The company's founder, Mr. Kincaid, now old and frail, came over from the US to preside over the unveiling of the new fountain, attended by 1000 guests. The factory building was bedecked in flags from around the world and tea served in a huge marquee and in the dining room. In the evening, floodlights and festoons of coloured lights illuminated the factory. A replica of the fountain was presented to Mr. Moore, the first managing director of the British company.¹⁹⁸

Conclusion

This chapter has argued that the factory garden was increasingly understood in the period as an important part of corporate welfare and civic improvement, although the

¹⁹⁷ See 'Notes of the Month' *Threads* IV: 41 (July 1931), pp. 79-81 and *The Spirella Magazine 21st Birthday Souvenir Number I*: 6 (June 1931), FGCHM

¹⁹⁸ See film 'A British Industry's Coming of Age', produced for the 21st anniversary of Spirella in 1931, FGCHM, 762, (762.1; 762.2; 762.3)

idea did not become mainstream in industrial planning until after the Second World War. Factory landscapes were initially motivated by private profit, but their benefits were recognised and soon absorbed into public planning policies, along with domestic gardens, public parks and street landscaping. As more factories were built in, or on the edge of suburbs, landscaping was seen as the panacea to their possible negative aesthetic and psychological effects. As Charles Mulford Robinson expressed it in 1904, 'the factory itself, now vine-covered and garden-surrounded [was] less to be dreaded.'¹⁹⁹ Some industrialists like John Patterson of the NCR claimed that they set precedents in planning policies by making an example to their neighbourhood and establishing themselves as the local experts on landscaping and gardening. The evidence suggests therefore that the influence of industry on gardens and gardening in this period is more significant than is currently understood.

It could be argued that landscaping and recreation at factories were part of an anaesthetising process to pacify and control an increasingly politically aware workforce and therefore were part of a reactionary dogma to slow down or halt modernity. An alternative view might be that they represented a modern progressive industrial outlook, an attempt to avoid the exploitations of the past and an awareness of the importance of image to corporate success. It was very common in the early 20th century for thinking about the future to be shaped by contradictions; on the one hand to produce revolutionary, forward-thinking solutions while on the other, nurturing a nostalgic vision of the past. Henry Ford is a good example, with his celebrated model-T, the first car to be built on an automated production line and his creation of Greenfield Village, his nostalgic celebration of a rural past. The motives for

¹⁹⁹ Robinson, C. M. *Modern Civic Art* (London, 1998), p. 252

landscaping were multi-dimensional and therefore ambiguously traditional and modern at the same time in attempting to create a union of industry and nature. They are also ambiguous in their mixed motives of altruism and personal gain. Therefore responses to these landscapes are particularly interesting, for while there is evidence that good design promoted a stable and contented workforce in some plants, other evidence exists of discontented and suspicious factory workers who resented good design and conditions, regarding them as veneers to encourage passivity or as a cover-up for alternative benefits like higher wages.²⁰⁰ There is therefore a clash between a management that considered itself increasingly modern in the way the factory was organised, and a workforce, trying to play a greater role in the commercial benefits of modernity. Environmental determinism applied to urban design for worker control does not necessarily make for contented workers. This factor will be analysed further in Chapter 8, but before returning in more depth to these issues, it is necessary to look more closely at the idea of the garden itself to ask why this type of space and the activities made possible within it, were thought to be so beneficial.

²⁰⁰ Stilgoe, *Borderland*, 252

Chapter 3: 'The Factory in a Garden' and 'The Garden in a Factory'

Chapters 1 and 2 have shown that landscaping became a feature of many model and 'modern' factories by the early years of the 20th century. This chapter will discuss how, from the late 19th century, a number of industrialists exploited the design, aesthetic and space of gardens as a powerful cultural metaphor in an attempt to shape morality, increase productivity and improve the company image. The making of gardens and recreation grounds at factories was part of a cultural and social engineering strategy, to control the behaviour and improve the productivity of employees and to project a company positively as a high status institution that was at the same time a secure, respectable and healthy community. As has been shown, gardens and landscaping had at times been employed for these means since the beginning of the factory system, but by the end of the century, landscaping at factories was becoming more sophisticated in terms of design and amenity. In America from the 1880s and to a lesser extent in Britain from the 1910s, the expertise of professional landscapists with specialist design and horticultural knowledge made it possible to enhance the beauty and function of the available space.¹

The motives for making the factory pleasure gardens (including the cosmetic landscaping around the factory buildings) and the children's allotment gardens will now be examined in more depth. In the last chapter, it was established that at some factories, particularly from the 1920s, the pleasure garden was combined with a recreation ground to provide for sports and so the factory garden became more like a

¹ See letter from the Olmsted firm to J.F. Garner of the Kohler Co., advising on plants for the office landscape that were resistant to pollution from the factory. 09 Grounds of Commercial and Industrial Firms, Kohler Company, Factory Grounds, Kohler, Wisconsin, LC.MD.OAR, 007392, Reel 375

park. The design of these parks in relation to the practical motives for making them will be examined in Chapters 5 and 6. This chapter will focus on the functional and symbolic meanings of gardens as utopias, to show how the factory gardens were designed to express the ideal of the garden as a place of aesthetic beauty, ordered respectability and refreshment of the mind which was the image of gardens and parks promoted by reformers in this period, many driven by puritan religious principles. The role of the garden as a productive space will also be examined in relation to the factory allotment gardens. However, it will be shown that gardens were not always regarded as 'respectable,' which made the garden metaphor in a factory context problematic.

The chapter analyses why gardens matter, and why they are deemed to be 'a good thing' which is a subject of particular interest to academics researching gardens at present, from garden historians to anthropologists, sociologists and philosophers. The discussion will show how gardens and gardening in this period were designed to project multiple messages, to 'engineer' particular feelings, ideas, modes of behaviour and well-being amongst employees and consumers and examples will be given from the case studies.

Why do gardens matter?

Why do gardens matter so much and why are they thought to be good for us? These questions have been debated throughout history and more recently writers have advanced theories about the relationship between humans and landscape and the ways in which we have defined ourselves in literature through our rural past and

relationship with nature.² Another approach adopted by cultural geographers, to analyse the deeper ideological structures in landscape was taken up in the 1990s by the best garden historians, who joined landscape historians and cultural geographers in their search for a more conceptual approach to gardens. The objective was to extend late 19th and early 20th century theories on the values of gardens by presenting ideas about garden and landscape design that encompass not only an ethical but also a broader philosophical approach which took into account sociological and psychological data on the value of gardens.³

James Elkins in an article in the *Journal of Garden History* explained just why it is so difficult to be successful in analysing gardens conceptually, because the very nature of gardens, their complexity and changeability, produces a conceptual confusion.⁴

John Dixon Hunt however, two years earlier in his article 'The Garden as a Cultural Object' had already successfully unravelled some of this confusion by considering the problematical dialectic between art and nature in garden theory and practice. By acknowledging the complexities of gardens (what he called 'a garden's hugely inclusive realm'⁵), Hunt went on to provide a framework for the study of gardens in his book *Greater Perfections: the Practice of Garden Theory* in which he reasserted the importance of combining a conceptual approach to landscape architecture with practical knowledge, in order to find the principles that shape the practice.⁶ Hunt revisited ideas about the relationship between gardens and the human condition and

² See for example Wolschke-Bulmahn, J. 'Ethics and Morality. Questions in the History of Garden and Landscape Design: A Preliminary Essay' *Journal of Garden History* 14:3 (1994), 140-6; Williams, R. *The Country and the City* (London, 1985); Marx L. *The Machine in the Garden: Technology and the Pastoral Ideal in America* New York (New York, 1964); Knoepfelmacher and Tennyson *Nature and Brown, J. The Pursuit of Paradise. A Social History of Gardens and Gardening* (London, 1999)

³ See Francis and Hester, *The Meaning of Gardens*

⁴ Elkins, 'On the Conceptual Analysis of Gardens'

⁵ Dixon Hunt, J. 'The Garden as Cultural Object' in Wrede and Adams *Denatured Visions*

⁶ Dixon Hunt, *Greater Perfections*

argued that gardens and parks are types of landscapes that define both the individual and the more universal concerns and preoccupations of humankind. He concluded that landscape architecture is about place-making - the shaping of an environment that is a 'central human activity' and is 'arguably a matrix of man's and woman's ambitions, instincts and desires.'⁷ This seems to me to be a more realistic and helpful approach to gardens, than one that attempts to construct an overall theory or philosophy of gardens.

Other writers who have attempted philosophical and historical analyses of gardens have agreed with Hunt that gardens can be seen as a metaphor for the human condition, for they are made up of plants that live, grow and die just like us. Mara Miller has suggested that the garden is a metaphor for an ideal human life, for relations between human beings, the state or the community and she suggests that a garden is always an act of hope, for humans care for plants which have the potential to bring us aesthetic pleasure, but that they also represent human caring because we try to control our physical surroundings to make them better.⁸ A garden therefore, is not simply a metaphor for the wholesome life, as Ruskin and other garden moralists of the late 19th and early 20th centuries concluded, but it is a framed landscape which encompasses all the wider ideological and symbolic meanings of our relationship with nature, and therefore becomes a conceptual metaphor for fundamental human actions and beliefs. It is chiefly the garden's dependence on nature, our source of life and sustenance that makes it so central to life and therefore central to the good life. A survey conducted by Mass Observation in the early 1940s supports the suggestion that most adults of all classes in the period of study valued, even 'treasured' their gardens,

⁷ Ibid., 216

⁸ Miller, M. *The Garden as an Art* (Albany, 1993), pp. 25-33

and that for those with greater economic need, garden space was regarded as an extra source of food from vegetables and livestock, as well as for rest and retreat. These results are hardly surprising considering it was wartime, but the survey was designed to contribute to housing policy after the War and the respondents' expressions of their love of gardens suggested pleasure as well as need.⁹

Having outlined reasons why gardens were seen as a good thing, the next section will look at how industrialists were able to shape their image through garden and landscape design using the mythical and symbolic positives of the idea of a garden as a method of influence and to an extent, of control.

The factory garden for status: shaping the image of a community

By the end of the 19th century, gardens at factories were playing an increasingly important role in moulding the physical and symbolic image of a company and its community in a variety of subtle ways. Some industrialists like Titus Salt and William Lever laid out parks near their factories, to frame or shape the image of the factory, while others like Pullman, Cadbury, and the Presidents of the NCR, Spirella and Ovaltine went further and placed their factory within a landscaped park or garden (or in the case of Shredded Wheat at Welwyn, an American ranch-style landscape).

Factories that resembled palaces or country houses suggested associations with an aristocratic lineage and avoided the negative associations of the workhouse, prison or asylum. The factory was presented as a high-class country estate or manor house that not only looked impressive, but also one that cared for the workforce on a feudal

⁹ Mass Observation 'An Enquiry into People's Homes' File Report 1654, (London, 1943) pp. 16-17
Mass Observation Online; Adam Matthew Digital Online Resource
(<http://www.amdigital.co.uk/collections/Mass-Observation-Online/>, accessed 4 October 2010)

model, as a community with common goals and familial relationships. **(Fig. 3.1)**

These oppositions of feudal country estate and exploitative industrial life are illustrated in Vita Sackville West's *The Edwardians*, (1930), where feudal country house society begins to break down when the son of a servant leaves to seek work in the motor industry.¹⁰

From at least the mid 17th century with the development of avenue gardens in Britain with their tree avenues stretching several miles into the distance, the landowner had expressed ownership and status through garden design, not only of his immediate territory, but also of the possibility of the unlimited territory beyond. In the same way that landowners in the 18th century employed both architect and landscape architect to design their house and grounds, so a number of 19th and 20th century industrialists employed both professionals to create a high status environment that met their aspirations. As Mara Miller has shown, grand gardens are the ultimate expression of wealth, because having constructed and planted them at great expense; the landowner is required to check the march of nature and maintain them daily.¹¹

Pullman, at his coach works in Illinois, the Cadbury Brothers in Bournville, William Lever at Port Sunlight and John Patterson at the NCR were pioneers in this respect since they devoted a large proportion of their estates to landscaping and they all employed landscape architects to design their factory grounds or villages to create aesthetically and socially innovative workplaces. The factory estates were intended to be very visible, both physically, as they were designed for a large variety of recreational purposes and they were often made to exploit the best views from the

¹⁰ (London, 1983)

¹¹ Miller, *The Garden*, 56

railway, road or canal, and metaphorically, as they were also very visible in the ways in which they were mediated through company literature and advertising. Above all, the landscapes were designed to impress and to persuade the local suburban or rural workforce and the potential shareholders and customers, that a factory need not be a blot on the landscape, but a positive economic, social and even aesthetic benefit to the neighbourhood. And in addition to this, the landscapes assisted in projecting the factory as a safe and respectable community.

José Harris has suggested that towards the turn of the 19th century, the need for industrialists to create stable communities became even more urgent. As the worker became more independent through greater educational and political involvement, and could now enjoy more fun and fulfilment in the growing leisure industry, so the possibilities of personal freedom seemed more attainable and work more like a necessary evil. This growing sense of human individuality, solidarity and dislike of authority, argues Harris, became increasingly ill-adapted to authoritarian workplaces and production line processes.¹² The negative aspects of factory work could be countered by a dynamic work culture, which, argued McKibbin, was what helped to make working life tolerable.¹³ The encouragement of personal friendships, community spirit and familial loyalty were strengthened by the possibilities afforded by the space and the plants in the garden. Group photographs and a large variety of recreational activities and company events like carnivals and other musical and dramatic performances became possible in the gardens, as will be discussed in Chapter 4.

¹² Harris, *Private Lives*, 135-149

¹³ McKibbin, *Classes and Cultures*, 129

If personal freedom and a dislike of the production line began to threaten industrial progress and stability, the factory owners had to employ subtle strategies to make their factories more appealing to their workforce.¹⁴ This is where techniques of social engineering came in, where good design and attractive amenities and systems were adopted to increase the desirability of the factory. The factory had to look more attractive, clean and homely and more morally respectable. In some areas, these factors were considered to be particularly important in attracting the female worker who was favoured in the growing numbers of light industries.¹⁵

The garden and ideals of home and family

Through the 19th century, the garden came to represent ideals of home, homeliness, domesticity, virtue and health and towards the end of the century, respectability and particularly female respectability. The sources of these ideas are found in utopian and religious ideals of home and family as the environment where virtue and Christian values were nurtured, with the mother as the ‘angel in the house’ and the father as provider. This was the era of the growth of the middle class garden and a burgeoning interest in all things horticultural and the suburban garden, enclosed and private, became an extension of the home and a social space and retreat for the family.¹⁶ As

¹⁴ The mechanised production line that became increasingly common from the early years of the 20th century intensified the monotony of a day’s work and caused mental and physical fatigue.

¹⁵ Historians disagree about the proportion of British women in full time work. Harris, *Private Lives*, 129, argues that after 1900, the proportion of women in full-time work gradually rose, but McKibbin, in *Classes and Cultures* says that the female proportion of the total workforce hardly changed in the first half of the 20th century (p. 111). What is clear however is that the type of work changed as more women were employed in light industries, offices and retail. In America, according to Kleinberg, the numbers of women who worked in factories rose from 18% in 1870 to 24% in 1920. Kleinberg, S.J. *Women in the United States 1830-1945* (New Brunswick, 1999), pp. 114-5.

¹⁶ Ruskin frequently wrote about the value of gardens and he was particularly seduced by the idea of the Virgin Mary in her Hortus Conclusus. In *Sesame and Lilies* (1866) he suggested that women thrive in the enclosed world of the garden, while men are more suited to public life.

Andrew Griffin has argued, suburban gardens were ‘green retreats...bowers and oases in a desert of brick and mortar...They survive under siege.’¹⁷

Lynne Hapgood has suggested that in the period 1880-1925, the popularity of ‘garden romances’ written by women (for example Elizabeth von Armin’s *Elizabeth and her German Garden*, 1898¹⁸), suggested that the suburban garden had a particular resonance for women, for their gardens were:

symbols that harnessed and democratised pastoral, picturesque, sublime and Romantic view[s] of nature...they acted simultaneously as a connection to the myths of the Golden Age and a reassurance that the lost domain had been restored, as reminders of childhood memories and promises of a new future. In both their actual and symbolic existence gardens embodied (en-natured) and feminised the suburban new.¹⁹

Women used gardens, Hapgood argues, to ‘negotiate’ their identities, their roles as wives and mothers but at the same time gardens had the potential to emancipate and empower. Middle-class women of course had more access to private gardens, but, Hapgood points out, working class women in their desire for gardens made the same symbolic connections to them.²⁰

The values represented through garden beauty, horticulture and the benefits of fresh air were extended into public space through recreational facilities in industrial villages and in the public park movement²¹ and by the 1880s were articulated by reformers in relation to the workplace too. For William Morris, gardens were essential in the organisation and production of space in his utopian vision of England in the year 2002

¹⁷ Griffin, A. ‘The Interior Garden and John Stuart Mill’ in Knoepflmacher and Tennyson, *Nature*, 171

¹⁸ Neglected by her husband, Elizabeth von Arnim is safe in her garden, but the wider world threatens her virtue. The book was hugely successful.

¹⁹ Hapgood, L. *Margins of Desire. The Suburbs in Fiction and Culture, 1880-1925* (Manchester and New York, 2005), p. 111

in *News from Nowhere* (1890). At Merton Abbey, his workshop in Surrey that produced textiles and wallpapers for the firm, Morris tried to practise some of his utopian principles by making an ideal workplace that included gardens. Borrowing largely from Ruskin, Morris's factory was characteristically contradictory, arguing in his article, 'A Factory as it Might Be', that a factory should stand in gardens 'as beautiful (climate apart) as those of Alcinoüs, which should be for beauty's sake, not for profit.'²² Morris did not like to mention any commercial motive in nurturing his garden at Merton Abbey, unlike his more pragmatic disciples, industrialists, planners, politicians and other reformers who sought to improve working conditions. The US Steel Corporation was one such example. The US Steel Bureau of Safety, Sanitation and Welfare Bulletin of 1914 reports a link between gardens, health and a happy home and at their mining villages in Michigan, Wisconsin and Minnesota, garden plots were provided next to the miners' houses:

Gardens and beautiful lawns help to make homes. A home means more than a mere shelter from the elements. The Beauty of the gardens and lawns exert a refining influence on the family, which shows inside of the house and in the behaviour of the members of the family toward each other. Home aids in the perfection of family life, in the making of a garden the members of the family are brought out into the open air and sunshine. This is especially beneficial to those who work in mines and mills.²³

The plants and planting styles around the factory buildings were also symbolic of good taste and of home and they tended to reflect the prevailing gardening tastes and ideologies. Climbing or creeping plants were particularly favoured in both Britain and the USA around 1900 to project messages of artistic taste and the kind of beauty that

²⁰ Ibid., p. 95. Hapgood refers to Charles Booth's interviews conducted in the 1890s in which the working classes aspired to houses with back gardens.

²¹ See Olmsted, F. L. *Public Parks and the Enlargement of Towns* (Manchester NH, 1970), p. 76

²² Morris, *A Factory*

²³ Bulletin No. 5 December 1914 quoted in Alenen, A. 'Immigrant gardens on a mining frontier' in Francis and Hester, *The Meaning of Gardens*, 160-165

embodied domestic values, for it was believed that these attributes would induce pride and familial loyalty in a workforce. Listing a number of firms who moved out to the edge of towns and cities, including Cadbury at Bournville, Rowntree at York, Lever Brothers at Port Sunlight, Clarks of Street, and Chivers of Histon near Cambridge, Budgett Meakin argued,

‘The ideal factory has some pretensions to taste in design, if not in extravagant ornament; it is to a great extent creeper-clad, and is surrounded by lawns and shrubs. Its windows are adorned with carefully tended pot flowers. The pride of the “hands”, and the whole place bears a home-like and “cared-for” look, indicative of the conditions of labour inside.’²⁴ [Fig. 3.2]

By the 1930s modernism had done away with climbing plants on new buildings and factories such as Bata and Hoover, with their clean lines, glass and white concrete, were embellished instead with lawns, shrubs and bedding plants. By this time the symbolism of tradition and domesticity represented in climbing plants had been replaced by a more orderly style of planting that denoted modern respectability and status.

Gardens and physical and mental health

José Harris has shown how in Britain from the 1880s onwards, there was a sense that society was changing, and fears of degeneracy and physical deterioration fuelled debates on public health and morality.²⁵ The relative poor health of the working classes became obvious in the Boer War (1899-1902), when only a tenth of potential recruits who had applied to enlist at Manchester were fit for service and physical health became a hot topic of debate.²⁶ Public health reform had been an issue since the early 19th century, fuelled by reformers such as Edwin Chadwick, but in the last

²⁴ Meakin, *Model Factories*, 73

²⁵ *Ibid.*

quarter of the 19th century reformers looked increasingly to improved urban design and planning to solve the nation's health problems. Ruskin's influence has already been mentioned. Another key reformer was the physician Benjamin Ward Richardson. In his book *Hygeia: A City of Health* (1876) he imagined a 'model' city in which the wide streets were planted with trees, shrubs and evergreens, all the houses had gardens and the public buildings were surrounded with generous garden space.²⁷ The design of William Morris's utopian cities in *News from Nowhere* (1890) echoes Richardson and as Clare Hickman has shown, Morris's recommendation that children should live in tents outside in the summer, reflected the 'new open-air philosophy' and the value of gardens and exercise to children that was gathering pace at the time.²⁸ The vision of healthy cities with plenty of green space was also the ideal of Edward Bellamy in his utopian text *Looking Backward* (1888), but unlike Morris's vision of the future, Bellamy's more rational city is built on a technocracy, dependent on an efficient industrial system.²⁹

The Garden City Movement that was partly inspired by Bellamy (Ebenezer Howard claimed Bellamy as a key influence) was built on theories of health and space derived from the reforming spirit and was thought by those who supported its theories and practice to be a solution to public health and well-being in the context of a capitalist society.³⁰ Garden suburbs and villages were created in this climate of reform and all

²⁶ See for example Atkins, J. B. *National Physical Training: An Open Debate* (London, 1904)

²⁷ Richardson, B. W. *Hygeia: A City of Health* (London, 1876), p. 20 in Hickman, C. "They are surrounded with garden space, and add not only to the beauty but to the healthiness of the city." An Exploration of the Relationship between Notions of Health and Disease and the Role of Green Space in late Nineteenth-Century Utopian Texts (Unpublished lecture, presented at the Institute for Historical Studies, London, January 2008)

²⁸ Ibid. Hickman also makes the connections between gardens, health and the theory and practice of hospital, asylum and prison gardens in the period. See also Rutherford 'Landscapes for the Mind'.

²⁹ (London, no date)

³⁰ Howard, *Garden Cities*. Clare Hickman has shown that Howard's theories of city planning were also indebted to Richardson. Hickman, 'They are Surrounded'

those with a vested interest in gardens, from writers to landscape gardeners and architects and politicians, expressed similar sentiments as to the value of gardens.³¹ Essentially, nature would play a part in the healing of the ills caused by industrialisation and open space and recreation would improve the health of the workforce.

Fresh air and exercise for youth was regarded as an antidote to moral and physical degeneracy and outdoor physical exercise became part of the school curriculum. According to David I. Macleod, many reformers in the late 19th century attributed environmental influences as well as heredity to delinquent behaviour amongst working class youth.³² John Patterson's solution to the disruptive Slidertown youth, was to engage him physically with the environment but in a controlled and supervised form, through gardening. In the opinion of Patterson and other reformers, 'The farm is the best school in the world' and the garden plot was the closest model to the farm in a suburban environment. John Patterson regarded his Boys' Gardens as a role model and catalyst for the Schools Gardens Movement that was developing in America, possibly with some justification. He was invited by the Association of Schools Gardens to make one of the two keynote speeches following the Schools Gardens Festival concert in the Carnegie Hall on 7 July 1916.³³ (Patterson used slides and a motion picture to illustrate his speech.) Patterson also opened Girls' gardens and the Cadburys, Rowntrees and Lever at Port Sunlight also had gardens for both sexes. **[Fig. 3.3]** At Rowntree, where the girls' plots were called 'gardens'

³¹ Ebenezer Howard, Raymond Unwin, Barry Parker, Clough Williams Ellis, Henrietta Barnett, William Lever, Thomas Mawson, George Cadbury, Edward Bellamy, Frederick Law Olmsted to name a few.

³² Macleod, D. I. *The Age of the Child: Children in America 1890-1920* (New York, 1998), p. 24

³³ Schools Gardens Festival Concert programme, 7 July 1916, NCR.DH

and the boys' and mens', 'allotments', gardeners were supplied with free seed and manure on condition of 'proper' gardening practices.

The beginning of the new century saw increasing discussion in the media about the value of exercise. Gardening as a hobby joined activities like walking and bicycling as an ideal form of recreation to be enjoyed in the suburbs.³⁴ By the 1920s, the benefits of sunlight to health was added to the equation when the 'cult of the open air' across all classes encouraged by 'progressive' social thought, saw a growing passion for hiking and organised sports.³⁵ Social policy encouraged public recreation in open spaces to create fit, responsible, law-abiding citizens. At the same time, social research was drawing more attention to the stultifying effects of factory work and the benefits of leisure to productivity and so it made economic sense for industrialists to encourage social, recreational and educational activities within the factory and its grounds where the workers' leisure time could be more easily supervised.

Peter Bailey has argued that disapproval, even fear of drink was the main incentive behind the making of parks and recreation grounds, as well as ballrooms, clubrooms and music halls at some of the early factory villages like Quarry Bank Mill and New Lanark.³⁶ By the 1880s the focus of moral panic had shifted to youth seen loitering in the streets 'with temptations of all kinds to draw them into folly and dissipation.'

Again, outdoor play and exercise was the panacea. One pamphlet, *Parks and Playgrounds for the People*, published in 1885, recommended that no one should live

³⁴ Stilgoe, *Borderland*, 260

³⁵ Worpole, K. *Here Comes the Sun: Architecture and Public Space in 20th century European Culture* (London, 2000), p. 88

³⁶ Bailey, P. *Leisure and Class in Victorian England. Rational Recreation and the Context for Control 1830-1885* (London, 1987), p. 27

more than a mile from a recreation ground.³⁷ While this was an unobtainable ideal particularly in suburban areas, between 1885 and 1914, more public parks were opened than at any other time³⁸ and in America, the activities in the growing number of Reform Parks, became increasingly structured and controlled.³⁹ According to Galen Cranz, the American reform park was designed as a place for organised play with an emphasis on community activities and to encourage an expression of American values and respectable behaviour. It was common for age and gender to be separated for some activities.

Gardens and respectability

As well as the physical benefits of fresh air and exercise, activity in gardens and parks was seen to represent and encourage a high moral outlook on life⁴⁰ and it has been suggested that even the design of planting schemes in parks may have been influenced by particular ideas about morality and nature.⁴¹ The redemptive power of gardens is a recurring theme in this period – beauty brings virtue and the sharing of that beauty draws together a community.⁴² The factory gardens were seen to play a vital role in worker respectability, not only by their associations with art, but also with moral virtue. There are many examples of art and literature in the 19th and early 20th centuries that represented the enclosed garden as a female domestic space, a space in which women could be nurtured and were safe and in which they were protected from

³⁷ Ibid., p. 16

³⁸ Jordan, H. 'Public Parks, 1885-1914' *Garden History* 22:1 (1994), 85-113

³⁹ Cranz, G. 'Reform Parks in the United States (1900-1930)' in Mosser, M. and Teyssot, G. *The History of Garden Design. The Western Tradition from the Renaissance to the Present Day* (London, 2000)

⁴⁰ Wolschke-Bulmahn J. (ed.) *Nature and Ideology: Natural Garden Design in the Twentieth Century* (Washington, 1997)

⁴¹ Young, T. 'Trees, the Park and Moral Order: the Significance of Golden Gate Park's First Plantings.' *Journal of Garden History* 14: 3 (1994), 158-170

⁴² Le Bas, E. 'The Making of a Socialist Arcadia: Arboriculture and Horticulture in the London Borough of Bermondsey after the Great War' *Garden History* 27:2 (Winter 1999), 219-237

the public, particularly the male gaze.⁴³ It was also fairly common in the 19th century for gardens to be provided exclusively for women in public places. Some time between 1859 and 1885, a place for ladies to promenade away from male attention was made in the garden of the Great Northern Hotel in Peterborough⁴⁴ and a sitting room for ladies was built beside the main entrance to Fountain Gardens in Paisley, Scotland (1868).⁴⁵

Religious faith was an important factor in the making of factory gardens although not exclusively so, because some of the key supporters of gardens at factories and in factory villages, including John Patterson, were not religious – ‘he interpreted his religion by his business.’⁴⁶ A significant number *were* devout Christians and the non-conformists, most notably the Quakers like the Cadburys, Frys and Rowntrees played a leading part in the factory garden movement. (A number of Quakers also built paternalistic company towns in the USA.⁴⁷) Quakers had traditionally been committed gardeners. According to Keith Thomas: ‘the early Quakers were often buried in their gardens’ because they regarded gardening as a ‘needful’ and ‘useful’ activity.⁴⁸ For Quakers and other non-conformists, gardens and gardening played a prominent role in social reform for they represented the antithesis of drunkenness and debauchery. (A high proportion of the members of the temperance movement were non-

⁴³ See Alfrey, N., Daniels, S., Postle, M. *Art of the Garden* (London, Tate Publishing, 2004)

⁴⁴ Davidson, B. A. ‘The Gardens of the Great Northern Hotel, Peterborough Cambridge’ in Way, T. (ed.) *Picturing Paradise: Studies in Eighteenth to Twentieth Century Gardens and Garden Design* (Cambridge, 2003), p. 26

⁴⁵ *Inaugural Ceremonies in Honour of the Opening of Fountain Gardens, Paisley* (Paisley, 1868)

⁴⁶ Booklet published in memory of John Patterson, p. 44. Ian Ormerod archive. Andrew Undershaft, the industrialist in George Bernard Shaw’s *Major Barbara* (1905) who built a village for his workforce, is an example of pragmatism driving philanthropy, not religion.

⁴⁷ See Garner, *The Company Town*, 8-9

⁴⁸ Thomas, K *Man and the Natural World*, p. 237 in Hackett Fischer, D. *Albion’s Seed. Four British Folkways in America* (Oxford, New York, 1989), pp. 554-555. Thomas points out that the Society of Friends produced ‘a quite disproportionate number of botanists, plant-collectors and nurserymen.’

conformists.⁴⁹) They had to be the right kind of gardens though, for gardens had long been associated not only with religious morality but also with illicit freedoms and pleasures. Those who fought against temperance, believed that society should ‘recognise the psychological aspect of amusement’ that Brian Harrison argues was found in the private pleasure gardens that had been enjoyed in the 18th century, but closed down by puritans in the 1820s.⁵⁰

For the Cadburys, Rowntrees and John Patterson and his heirs, some of the most committed patrons of gardens, their own gardens were the respectable kind and they opened them as supplementary space for the use of their employees and for other social projects outside their business life. They were also the patrons of considerable tracts of land for public parks in their local regions.⁵¹ To varying degrees it was commonplace for the industrialist to reinforce paternal benevolence by inviting his employees to his house on special occasions, especially in the summer when the garden could accommodate large numbers. As Joyce has suggested, the employer’s residence played a large part in ‘sustaining the mythology of the family’⁵² and they also became models for how to enjoy a garden. Evidence from company magazines supports this view for they regularly reported on gatherings or parties, sometimes house parties, but more often outdoor events like garden parties or picnics put on for the workforce. George Cadbury, who devoted a high proportion of his spare time to social projects, built a barn near the lake at his home, the Manor House, so that poor

⁴⁹ Harrison, B.H. *Drink and the Victorians. The Temperance Question in England 1815-1872* (Keele, 1994), p. 167

⁵⁰ Pendered, A. M ‘The Psychology of Amusement in its Relation to Temperance’ *Socialist Review* (June 1909), 285- 291 in *Ibid.*, p. 380

⁵¹ See for example Bromhead, J. ‘George Cadbury’s Contribution to Sport’ *The Sports Historian* 20:1, (May 2000), 97-117; Marks, W. *George Cadbury Junior 1878-1954* (Birmingham, no date); Joseph Rowntree Village Trust *One Man’s Vision. The Story of the Joseph Rowntree Village Trust* (London, 1954)

⁵² Joyce, *Work, Society and Politics*, 185

children from Birmingham could come out for days of fresh air, swimming, sports and teas.⁵³ When John Patterson went to Europe for an extended visit, he opened his private gardens to his workforce.⁵⁴

From the 1890s, there was a general expectation amongst a more politicised working population of better standards and conditions at work.⁵⁵ A model factory that was based on strictly devout principles would have had a particular appeal to many workers in the period and even if not devout, the association of religious principles with virtue and respectability would have attracted workers and their parents to a firm that protected the virtue of their female offspring. Women workers were important to some of the newer, light industries, partly because they were cheaper labour, and partly because women were regarded as more malleable, more willing to do repetitive tasks and less likely to be unionised since their working life was likely to be curtailed by marriage and children.⁵⁶ Ross McKibbin has shown how some companies in the early 20th century, seeking more female employees in the growing numbers of light industries, used ‘art’ to attract the notoriously fickle female worker. Girls and their parents were attracted to companies with ‘taste’, for that attribute, they thought, brought with it respectability and class.⁵⁷ Model factories with a high proportion of female workers would often provide exclusively female spaces like gardens, dining rooms and rest rooms which were ‘tastefully’ designed and furnished – the lily pond in the garden or prints on the walls and pot plants on the tables brought ‘taste’ and ‘class’ to the female spaces. Many factories had separate entrances for men and

⁵³ Gardiner, A.G. *The Life of George Cadbury* (London, 1923), p. 128

⁵⁴ ‘Enjoy Far Hills Hospitality’ *NCR* XVII: 3 (August 1904), p. 137, NCR.DH

⁵⁵ Thompson, *The Rise of Respectable Society*, 244

⁵⁶ Kleinberg, *Women*, 114-5

⁵⁷ McKibbin, *Classes and Cultures*, pp. 135-6

women or the arrival and departure times were staggered to discourage contact between the sexes on, or near the factory premises.⁵⁸ Well-kept and designed gardens, and their associations with the status of ‘art’, tended to be made at factories with a high proportion of female workers. Cadbury and Rowntree had girls’ gardens.

[Fig.3.4] By the first decade of the 20th century, the NRC had designated recreation area for women.

The Spirella Corset factory at Letchworth Garden City and the Ovaltine factory at Kings Langley are examples of factories with a high proportion of female workers that had formal gardens to suggest class, high culture and respectability. Both gardens were designed to imitate the symmetry and structure of an Italian Renaissance garden, a style that had undergone another revival in the grand gardens of Edwardian England.⁵⁹ At Spirella, the central and dominant feature of the garden in front of the main façade, was a raised quatrefoil pond (not unlike Harold Peto’s Italianate pond at Buscot Park, Oxfordshire) with an urn at each quadrant and in the centre, an athletic water nymph brandished two jets of water into the air. **[Fig. 3.5]** The rest of the garden was laid out in a symmetrical relationship to the pond and defined by formal beds with topiary pyramids marking the corners of the formal design. A large lawned area on two levels lay between the road and the pond, framed by symmetrical turf steps on either side, suggesting an amphitheatre, another classical allusion. The Ovaltine factory also had a formal garden and to enhance the classical Arcadia, a pavilion designed like a rotunda.⁶⁰ **[Figs. 3.6, 3.7]** Both the Spirella and Ovaltine

⁵⁸ At the NCR, women arrived at work an hour later and left ten minutes before the men.

⁵⁹ Waymark, J. *Modern Garden Design. Innovation Since 1900* (London, 2003), p. 10

⁶⁰ See Low, J ‘Description and Analysis of Ovaltine Factory Kings’ Langley, Herts’ (Historic Building Record, 2004) Kings Langley Historical Society

gardens provided elegantly formal settings for the factory buildings and they would have been very visible from the road.

The Spirella factory had private garden spaces as well as public. A picture in the *Spirella Silver Jubilee 1910-1935*, reveals that an area probably to the side or rear of the building was regarded as 'A Quiet Corner' where employees could retreat away from the public gaze. Photographs suggest that the roof garden was a favourite destination for the female employees at Spirella but it must also have been used for company events since it was accessed from the ballroom.

The importance of the garden to the Spirella company image is highlighted by an illustration *The Spirella Magazine* of August 1932. **[Fig. 3.8]** A full page drawing to accompany the words of a popular song 'An Old Garden' and captioned 'A Peep into OUR (*sic*) Old Garden, shows a man and woman dressed in 18th century costume, courting in the Spirella gardens. The waterspouts from the fountain advertise 'Annual Conference and Reunion August 1932'.⁶¹ The formal garden is evoking not only the aristocratic way of life but also a chivalrous attitude of respect and protection to the female employees with the suggestion that Castle Corset is a safe place to work and its product desirable to respectable and high-class ladies.

Flowers are one final feature of gardens that should not be forgotten for their symbolic values of virtue, particularly devout female virtue and their placement in interior spaces has been associated with home and domesticity. (There are exceptions for flowers can also sometimes symbolise toxicity or sexuality.) In paintings and

⁶¹*The Spirella Magazine* XX1: 8 (August 1932), 116-117, FGCHM

photographs of the domestic interior, flowers are frequently placed to add beauty, but also they connote caring personal relationships.⁶² The growing and exchange of flowers in communities can be an important expression of shared experience and of mutual respect, or love.

The flowers that decorated the mill interiors at Lowell were placed to feminise and domesticate the workshops. Photographs of factory interiors taken from the 1890s to the 1930s show a profusion of flowers and pot plants, brought in from the works greenhouses and placed in hanging baskets and in pots and vases to beautify the offices, libraries and rest rooms, but even, at some works, the factory floor. At Cadbury in 1932-3, 9,000 flowering and foliage plants, vases of flowers and hanging baskets were brought in to decorate offices, and public areas of the factory, including visitor's tea tables, 200 sites in all. The floral metaphor was all encompassing, for on average about 80 vases were filled with fresh flowers every Monday, with more supplied for VIP visits and parties (600 plants and 70 vases for the New Year Party in 1932). The number increased when large parties visited the works and when there were special celebrations, for example 600 plants and 70 vases were used for the new year party. At Rowntree in York, large hanging log baskets filled with plants, no doubt made in the gardeners' workshops, can be seen in photographs of the factory floor. **[Fig. 3.9]** Most of the plants and flowers were produced from seed or from cuttings in the firm's greenhouses, which also supplied shrubs and bedding plants for the gardens and window boxes. The NCR had at least one greenhouse (the gardener lobbied for more, but without success) and at Rowntree, the elegant octagonal conservatory that ornamented the grounds nurtured exotic plants including cocoa and

⁶² Visit to 'Art of the Garden' exhibition on 2 July 2004, Tate Britain, London. Alfrey, *Art of the Garden*

provided an inspirational space for horticultural lectures. [Fig. 3.10] By the 1900s, large potted palms were particularly popular in reception areas, creating the relaxed ‘palm court’ atmosphere of a hotel or restaurant, thus symbolically denying the true, utilitarian function of the building. [Fig. 3.11] Flowers and plants were also frequently used to decorate formal photographs. A picture in the *Wonders of Niagara* booklet, in which life at the Shredded Wheat factory is prominent, shows the Employees’ Choral Society surrounded by pots and buckets of plants and flowers.

Amongst the Cadburys’ new glasshouses, built in the 1920s, were specialist hot houses for palms and carnations. [See Fig. 2.21] The carnations were grown partly for female employees, who, when they left to get married, were presented with a flower and a bible, symbols of bounty and Christian virtue.⁶³ (The Cadburys believed that the married woman’s place was in the home). The factory at Bournville, inside and out, was literally garlanded in flowers. A correspondent in the *Bournville Works Magazine*, March 1934 wrote passionately about the spring display of crocuses in Bournville Lane: ‘It is almost unbelievable – yes, and even unbearable – in its beauty. Bournville is robed in splendour.’⁶⁴ [Fig. 3.12] The gardeners at Cadbury were selling bedding plants from the greenhouses as recently as the 1980s.⁶⁵

The argument presented by some historians that industrialists ‘feminised’ their factories in this period is convincing because, as mentioned above, some industrialists needed to encourage women into the factory.⁶⁶ This was especially important during

⁶³ ‘Celebrations - Visit to Factory in a Garden’ *Glasgow Evening Times* (Monday 22 June 1931) This practice continued at Cadbury at least until the 1980s, although by this time it was a single flower and no bible.

⁶⁴ ‘Crocuses’ XXXII: 3 (March 1934), p. 86, CB

⁶⁵ Former employee, now working as a librarian at the Birmingham Central Library.

⁶⁶ Mandell, N. *The Corporation as Family* (Chapel Hill and London, 2002), p. 87

the First World War when the munitions factories tended to pay high wages. The Managing Director of the Ovaltine factory at Kings Langley expressed the solution to this problem in 1916 in a report discussing the problem of high wages in munitions:

Wander [Ovaltine] work is light and genteel and working conditions pleasant. This enables the company to retain a certain class of workers not fitted for strenuous munitions work.⁶⁷

Pleasure gardens and women's only gardens suggested a feminine identity and provided some privacy for the women, at the same time reinforcing gender stereotypes. However, a strategy to tempt women workers with gardens was less evident in some regions. In Nottingham in the late 19th, early 20th centuries for example, none of the three major new firms - John Player, Raleigh and Boots - had pleasure gardens, even though John Player and Boots employed a high number of women and Raleigh significant numbers. This could be surprising, particularly for Boots, as Jesse Boot was an admirer of the Cadburys and Rowntrees.⁶⁸ However, unlike Birmingham, which had industrialised predominantly through the metal trades that were dominated by men, the textile town of Nottingham had traditionally employed large numbers of women, therefore female employment was the norm in the city.⁶⁹ The Nottingham firms tempted the best kinds of female employees through good welfare schemes run by women, but these did not include gardens. This could be for a number of reasons. First, additional incentives to attract female employees were not considered necessary, as there was no shortage. Second, two of the companies, Boots and Raleigh were located in, or near the city centre and so space could have been an issue. Third, the owners of the companies did not have a personal

⁶⁷ Spain, A. *A Taste of Ovaltine. The Official Story* (2002), p. 23

⁶⁸ Chapman, S. *Jesse Boot of Boots the Chemists. A Study in Business History* (London, 1973), pp. 170-1

⁶⁹ Beckett, J. (ed.) *A Centenary History of Nottingham* (Manchester, 1997), p. 532. Beckett points out that traditionally, about two fifths of Nottingham's workforce had been women.

interest in gardens, unlike the Cadburys for example. However, when the Boots Company moved to the new site at Beeston on the edge of the city in the early 1930s, (the site was acquired in 1927 and their now famous ‘D10’ factory opened in 1933), the site was gradually landscaped with lawns, trees and shrubs.⁷⁰ Their new canteen and continuation school (D31 Building) built in 1938 was to have included a park to the east, but it was not landscaped beyond facilities for sports until the making of the recent Millennium Sculpture Garden.⁷¹ There is good evidence to suggest that both John Player and Raleigh *considered* making gardens or a park for their employees, but they did not materialise, which suggests that either they were not a priority, or that the Second World War scuppered their plans.⁷²

Place-making at Cadbury, Bournville and at the NCR Dayton

The final section will discuss in more detail some of the design features in the gardens of the two main case studies that contributed to a sense of place to create high status healthy and respectable working environments that protected and enhanced the virtue of their female employees and recreation space to promote health and motivation. In this section, the landscaping that was adjacent the factories up to the first decade of the 20th century will be discussed. The parks subsequently created by the two firms will be discussed in Chapter 6.

⁷⁰ See for example the photograph on the inside front cover of the company magazine *The Beacon* 15:4 (October 1938), BC

⁷¹ ‘Notes on D31 building’ (unpublished), BC

⁷² A plan of c.1938 to redevelop the pavilion at the John Player Recreation Ground includes a charming ‘cloister’- style garden. (Nottingham City Museums and Galleries) The Rowntree archive contains a hand-drawn sketch annotated ‘Raleigh Factory’ which appears to be a plan to transform the Raleigh Coach Road recreation ground into a park, to include a swimming pool and rustic bridges. It is undated and there is no explanation as to why it is in the Rowntree collection, BI.RC, R/DL/DunDunollie/1-2

These case studies epitomize the gentrification of a factory using landscaping, to increase the desirability and respectability of the site, reflecting the owner's moral and cultural aspirations and suggesting that their workers shared them. The example of Pullman has already been discussed as a failed attempt to design an industrial environment to shape a company's image. It has been shown that the Pullman design, however elegant, was more about promoting the status of the company and the respectability of the workforce and their families and keeping them under control than about their comfort. The landscaping was very public, contrived and self-conscious – there was nowhere to hide and it was symbolic of the high levels of surveillance that the workforce was subjected to.⁷³ The following case studies represent two different approaches to landscaping. The NCR used a much more informal landscape style that was a deliberate attempt to avoid another Pullman, although it was not successful in preventing labour unrest in itself since the company suffered a major strike in 1901. The Cadbury example suggests that the amenity value of the landscapes was as important to them as the aesthetic one, because their landscapes not only enhanced the factory environment, but also were designed for rest as well as active recreation.

The National Cash Register Company, Dayton, Ohio

The NCR approach to the landscaping of the factory suggests that initially, the company was specifically concerned to improve the reputation of the factory as a high status and respectable institution and to motivate the workforce to work more efficiently and to 'tame' the local youths with gardening discipline to shape them up as potential employees. The firm concentrated initially on the cosmetic landscaping

⁷³ Adelman, *Touring Pullman*, 13

of the factory, on their Boys' Garden and on a sports ground for men. Their female outdoor recreation areas came a few years later.

The arrangements and plans for the landscaping of the factory reveal the merits of employing a landscape firm of considerable reputation and experience which, with some relatively simple but creative ideas transformed the factory and its environs.

[Fig. 3.13] Letters and memoranda now in the Library of Congress in Washington reveal the Olmsted's sensitive handling of a demanding client, their attention to detail and their favoured style of informal planting contained within a structured plan. One of the first requirements was to create a view of the factory along the whole length of Main Street by planting a strip of ornamental ground between the north and south rows of buildings.⁷⁴ **[Fig. 3.14]** At the same time, Patterson wanted ideas to disguise ugly or utilitarian buildings adjacent to the factory. Adopting an Olmsted signature style of the rustic picturesque, John Charles placed an ornamental latticework arch at the entrance to the stable. On this and on neighbouring houses and fences he planted ornamental and climbing plants, including honeysuckle, japonica, virginia creeper and other ornamental vines. Fences considered ugly were removed and advertisements taken away from telegraph poles and fences. **[Fig. 3.15]** A plan of 9 January 1896 shows how the informal planting was offset by structure. The entire factory complex was to be surrounded by lawns, and trees were to be planted at regular intervals in wide pavements along all the roadways around the factory and surrounding houses.⁷⁵ Another plan dated 13 March 1896, showing flower and shrub planting around the factory buildings, completed a scheme that within a few years had transformed the

⁷⁴ J.C. Olmsted Memoranda, 25 October 1895, LC.MD.OAR, Series E, Reel 20

⁷⁵ 03 Subdivisions & Suburban Communities. Plan of NCR Co's Works 280-1, FLO.NHS

site from an ad hoc and unplanned industrial landscape into a more orderly, respectable and aesthetic site.⁷⁶

There is no evidence that seating areas were provided in the gardens around the factory site, so it seems that unlike Cadbury, the employees were not encouraged to use the gardens for rest or to eat their lunch. The 'English Garden' made by the Olmsteds in 1907 was outside the office buildings and again, this seems to have been for effect rather than use and for the pleasure of the white-collar, not the blue-collar employees. The garden, which looks more Dutch than English in style, had an ornamental fountain, which was intended to form an ice sculpture in winter, and evergreen shrubs at each corner for additional year-long interest. **[Fig. 3.16]** The Olmsteds clearly had a more informal English Arts and Crafts style in mind for the workforce's pleasure, for they suggested to Patterson that an addition of shade trees and perhaps a pergola might provide 'a lounging place where the men of the office could smoke in warm weather after luncheon.'⁷⁷ It appears that this never happened and in any case, the life of this garden was short because a new convention hall had been built on this site by 1911.⁷⁸

From 1904, significant landscaping was done on the land to the south and south west of the factory to make it look like a landscaped park, with lake and extensive planting of trees and shrubs including American elm, white willows, rosemary willows, elder, spirea, briar and prairie roses.⁷⁹ Design was also used specifically to improve the

⁷⁶ Ibid. 280-2 Planting Plan

⁷⁷ Letter 1 March 1907, LC.MD.OAR, Series B, Reel 20.

⁷⁸ Letters between Colonel Deeds and Olmsted Brothers June and July 1911, LC.MD.OAR, Series B, Reel 20.

⁷⁹ Plans of NCR Works: 00280 Subdivisions & Suburban Communities, FLO.NHS, Plan no: 280 – 122. See also *The NCR* (September 1904), NCR.DH. The 1937 plan of the NCR estate gives further

women's areas to add a domestic touch and sense of privacy to their dormitory and dining room. The Olmsted's aspiration for a pergola at the NCR was achieved, for a fine drawing in the Olmsted archive and subsequent photographs show a substantial vine-clad pergola that connected the two buildings.⁸⁰ **[Fig. 3.17]** Amenities for women were improved with the addition of an outdoor gymnasium and changing rooms, tennis courts and for men an athletic field with running track. **[Fig. 3.18]**

In 1906 the working day at the NCR was reduced to 9 hours⁸¹ and this was the year in which the next park-making project began at the NCR. The Hills and Dales Park will be discussed in Chapter 6.

Cadbury, Bournville

When the Cadburys built their new factory at Bournville from 1879, they made private gardens for their female employees and a sports ground for the men and planted up the factory environs. Like Patterson at the NCR, they used lawns and plants to enhance their office buildings and the works entrances to the factory, but whereas the NCR buildings were in the modern 'daylight' factory style with more open landscapes, the Cadbury office buildings and works entrances were 'Tudorbethan' and the trellis gardens gave a cosy, domestic sense of place. **[See Fig. 2.19]** (The trellis was a favourite feature of the private Arts and Crafts garden for it was usually constructed using local materials, added spatial variety to a site and provided space for attractive climbing plants.)

information on landscaping before the making of Old River Park in the late 1930s, FLO.NHS, Plan no: 280-163, 30 August 1937

⁸⁰ Plans of NCR Co's Works: 00280 Subdivisions & Suburban Communities, FLO.NHS, Plan no: 280-112, 15 September 1904

As soon as they bought the neighbouring Bournbrook estate in 1895, the Cadburys were able to provide a much larger pleasure garden and recreation ground for their ‘girls’ and a sports field for the men. The layout and design of the Girls’ Grounds at Cadbury and the buildings there were particularly successful in contributing to the image of a high status, respectable, yet caring company. The Grounds were extensive, very private, but above all they contributed a sense of history and continuity to the industrial site. The proximity of the Bournbrook estate to the factory was serendipitous for the distinctive Palladian house was clearly visible from the road approaching the factory from the south. [See Fig. 2.17] The gardens were spacious and already mature with lawns, parkland and a variety of trees and the estate had the added advantage of a sizable kitchen garden with glasshouses, outbuildings and a water supply.⁸² The 1840 tithe map shows the hall standing in a garden to the north and kitchen garden to the south surrounded by lawns with a serpentine path leading to a pond overlooked by a summerhouse, or pavilion. [Fig.3.19] The grounds were partly landscaped, but the high proportion of marsh and other low-lying land suggests that the land could have been neglected for some years. Perhaps it had followed the pattern of neglect of so many 18th century landscapes found by John Julius Loudon as he travelled the English countryside in the 1820s and 1830s.⁸³ By the time the Cadburys acquired it however, the garden had been restored according to Loudon’s recommendations, and given more variety with a sequence of spaces created by new planting, including a belt of conifers leading to a shallow valley where the pond had been, with the summerhouse still there as the focal point. (The garden seen in the 1882 OS map is almost identical in layout to Loudon’s villa garden illustrated in *The*

⁸¹ ‘Company Adopts Nine-Hour Day’ *World NCR* 1:4 (June 1906), p.5, NCR.DH

⁸² Bournbrook Hall’s most recent tenant had been William Martin who completed the Birmingham School of Art after J.H. Chamberlain’s death.

⁸³ See Elliott, B. *Victorian Gardens* (London, 1986)

Suburban Gardener.⁸⁴) A conservatory had been added to the house, and the family's needs supplied by a kitchen garden, with water supply, several glasshouses, orchards, paddocks and stables. Although considerably larger than Loudon's villa, Bournbrook Hall had everything '...that is essential to happiness, in the garden, park, and demesne of the most extensive country residence.'⁸⁵

The Cadburys invested in the historic grounds over the next twenty years in accordance with their vision of a respectable and model factory with connotations of domesticity. Like the Men's Pavilion, the rustic gymnasium and cycle shed built for the women were not utilitarian structures, but designed to be in keeping with the garden idyll of a country house or suburban villa.⁸⁶ [Fig.3.20] The improvements made to the Girls' Grounds from 1907, with a pergola at one end and Italianate garden at the other, reflected the fashionable Arts and Crafts gardens of the day that were influenced by the Italian Renaissance.⁸⁷ Cheals redesigned the former stables of Bournbrook Hall into a sequence of garden buildings against the kitchen garden wall, a brick pavilion or arbour surmounted by a weather vane and a small loggia, or viewing shelter overlooking a grass tennis court. [Fig.3.21. See also Fig. 2.20] The Italianate flavour was echoed below the tennis court where the house had been, with a formal sunken garden and lily pond (the cellars of the demolished house made a convenient hole), surrounded by hedging and seats, and accessed by steps with cannon balls on plinths.⁸⁸ (The pond water came from the same that supplied the

⁸⁴ Illustrated in Creese, 'Imagination in the Suburb', 50

⁸⁵ Loudon, J.C. *The Suburban Gardener and Villa Companion* (1838) in *Ibid.*, p. 50

⁸⁶ The pavilion, later extended into a gymnasium was designed by Baylis and Inman, 'Rustic and Rockery Workers' of Birmingham, The cycle shed was designed by the firm's architect, George Lewin.

⁸⁷ See Ottewill, D. *Edwardian Gardens* (New York and London, 1989) and Jennings, A. *Edwardian Gardens* (London, 2005), p. 20.

⁸⁸ Cheals of Crawley (Garden Architects) Plan. 'Cadbury Bros Bournville Girls' Recreation Ground Plan and Details of Proposed Alterations to Stables etc., no date, CB, Cadbury drawing no: 3260; Cadbury Engineers' Office Drawing of Girls' Grounds dated 1911, CB, Cadbury drawing no:

factory, an idea that goes back to the Warmley gardens in the 18th century.⁸⁹⁾

[Fig.3.22]

In the early 1930s, the Cadburys made a new formal garden on the Men's Recreation Ground below the steps up to the terrace of the new dining hall, built in the 1920s.

The style is different to that of the Girls' Grounds. The English vernacular was replaced by a more modern, functional space that reflected the more utilitarian architecture. Tradition was not abandoned however, because the design is a pared-down form of a formal garden with Italianate fountain.⁹⁰ The choice of a statue for the fountain of the goddess Terpsichore was thought by some to have been an employees' joke at the expense of the devout Cadburys.⁹¹ The statue is brazenly nude – quite a contrast to the image of the chaste female worker, all dressed in white. **[See Fig. 7.22]** As the muse of dance, song and drama, Terpsichore represents the theatrical potential of gardens so actively promoted by the Cadburys, but she also expresses the sensual spirit of gardens that they wished to suppress. **[See Fig. 2.23]**

Conclusion

The factory landscapes served a variety of different functions in assisting in the shaping of the company identity both for the consumer and for the factory worker.

They gave the factories social and cultural capital, aesthetically and symbolically and they also assisted in creating a sense of place, and suggesting a clean, orderly and

3574EAT. These two drawings suggest that the Engineers' Office also had input into the design of the Girls' Grounds.

⁸⁹ There are other examples of water features in factory gardens that were supplied by the factory waste. At Boden's net factory in Derby a courtyard garden of raised bed of shrubs and flowers sported a fountain powered by water from the factory boilers and the pond was warm enough to grow water lilies. See Meakin, *Model Factories*, 77

⁹⁰ 'Employees gift to the firm' *BWM* 8: XXI (August 1933), pp. 232-38, CB

⁹¹ Interview with Alan Shrimpton, former archivist of the Bournville Village Trust, 26 November 2009

healthy community. The gardens for women and the flowers in the factory projected messages of respectability and female virtue. The industrialists were manipulating their workforce, or participating in a social engineering project for they were motivating their workforce by inducing a sense of loyalty to the company.

This analysis of factory gardens, an unusual garden type, has revealed that the conclusion of a recent philosophy of gardens is perhaps closer to Ruskin's romanticised approach to gardens than we might think. David Cooper, in his *Philosophy of Gardens* takes up the question of the virtues of gardens and gardening, by asking the question how do gardens engage with people's lives and contribute to their living well?⁹² Cooper charts the long tradition of associating gardens with the virtues and the good life that shifted in the late 18th century when gardening became associated with morality, with responsible citizenship and an antidote to temptation, to more recent analyses in psychology and sociology that have produced empirical evidence that gardens are good for our health and well being. But, Cooper argues, none of these theories address the fundamental question as to *why* certain garden practices 'invite' or 'bring on' the exercise of virtues. Cooper suggests that this can only happen with a proper understanding and appreciation of gardens – in simple terms he says, to grow a good squash, you must know how to do it and this imposes a structure on life and brings on a kind of humility and hope. In defending this argument, Cooper quotes Iris Murdoch who saw a garden as a 'Selfless respect for reality.'⁹³

⁹² Cooper, *Philosophy of Gardens*, 20

⁹³ *Ibid.*, 96

For Cooper then, the garden is an ‘epiphany’ of a certain relation between human creative activity and ‘the mysterious ground’ of the world in which human beings act, - a symbol in the Romantic sense – of the relation between the source of the world and ourselves.’⁹⁴ This helps to explain some of the reasons why industrialists made their gardens, because they liked them and they thought their workforce would be happy and gratified to have such spaces. However, this study challenges Cooper’s conclusion that the garden is an epiphany, and shows that his interpretation is indeed Romantic. For gardens that are made to influence others as factory gardens were, may be motivated partly by the desire to donate, or to provide the epiphany experience for those who might need it or appreciate it during their working day – an antidote to the ‘Sodom and Gomorrah manufactory’. But because the provision of a factory garden is not wholly a selfless act, because it is also a manipulation of others for the benefit of a business, then a garden is more ambiguous in these circumstances. Gardens are made to offer an epiphany experience, but if they are places where the user is controlled in some way, the users do not have the autonomy to choose how to use the space – they have no control over it and so it cannot be *their* epiphany. Similarly, the ideal of a garden in utopia is problematic since gardens in Utopia, like those in Edward Bellamy’s Boston in the year 2000⁹⁵, or the landscapes in Aldous Huxley’s *Brave New World*⁹⁶ are symbols of social control.⁹⁷

This chapter has examined some of the motives for the making of factory gardens and recreation grounds and has outlined their designs, but a analysis of the reasons for

⁹⁴ Ibid., 150

⁹⁵ *Looking Backward* (1888)

⁹⁶ (London, 1955)

⁹⁷ Chance, H. “Consulting the Genius of the Plant” Uniting the machine and the garden in Utopia’ Unpublished paper given at ‘Utopias and Modernism: Convergences in the Arts’ University of Birmingham, 23-24 April 2010

making these spaces and their effects cannot be complete without an examination of how the gardens were used, which is the subject of the next chapter. While the gardens represented symbolically the ideas of status, health and respectability, they were made with specific activities in mind and it is necessary to analyse the types of activity and how they were conducted, by whom, and how frequently, to fully understand the extent of the time and expense that was devoted to gardens and gardening at the factory and to try to assess their effects. It has already been suggested that factory gardens cannot live up to David Cooper's assertion that the garden is an epiphany because their users did not have the freedom of choice that the idea of epiphany implies. An analysis of the activities in the gardens and the extent to which these were represented in company literature will reveal further evidence as to how far the workforce derived pleasure and other benefits from the gardens.

Chapter 4: 'Happy healthy workers are the world's best'⁹⁸: Factory Landscapes, Leisure and the Model Employee

One warm evening in the summer of 1933, an employee of the Spirella Corset Company in Letchworth Garden City called in on the company sports ground to see what was going on. On a previous visit in the spring, the grounds had been disappointingly quiet, but this time the thwack and thud of cricket and tennis balls and the sound of dance music coming from the pavilion evoked the sights and sounds of an English summer arcadia. 'These summer evenings are delightful...' wrote the employee, F.G.W. in the company journal, '...[with the grounds] populated by a happy throng...and the setting with its surrounding foliage of chestnut, oak, elm and poplar is enough to draw anyone.'⁹⁹ Recreation grounds like these at Spirella for company sports, music and dancing outside working hours, were typical of the leisure facilities provided by employers committed to worker welfare by the 1930s. The landscapes at Spirella were some of the best in UK and US industry, for as well as the nine acres laid out for hockey, cricket, football and tennis a short distance from the factory, the company also boasted a formal pleasure garden and a roof garden for their employees' use.

The preceding chapters have established that the beauty of good landscaping and the activities made possible by the factory gardens and recreation grounds were regarded as antidotes to factory work and were part of a social engineering process to produce a healthier, more productive and loyal workforce. This chapter and the next will explore the multiple ways in which the pleasure gardens, allotment gardens and

⁹⁸ Spirella Corset Company *Great Oaks* (late 1940s?), FGCHM 100

⁹⁹ 'What I think of our Sports Ground' *Threads* VI: 65 (July 1933), 96-7, FGCHM

recreation grounds were used for the social and cultural betterment of factory workers, which reflected ideals of 'rational recreation' at the time. The discussion will consider the extent to which the amenities presented by the gardens and recreation grounds enhanced the recreational and educational opportunities for the workforce. The range and variety of outdoor recreational opportunities varied considerably due to the physical and economic scale of the enterprise, the corporate welfare strategy and the level of interest in gardens and gardening of its patron. The most popular outdoor activities that took place at factories and the ones that took up the most space were of course sports, and sports grounds were more common at factories than pleasure grounds. Company sports will be discussed in more detail in the next chapter in relation to the design of the sports grounds. This chapter will focus on the non-sporting activities in the factory gardens, including music, dancing, theatre, fêtes, pageants and allotment gardening.

The discussion will analyse the provision and use of the leisure and recreation amenities in the context of the social history of recreation in the period 1880-1939. By comparing popular recreational activities outside the workplace with the types of cultural and social events that took place in the factory landscapes, it has been possible to understand why recreational arrangements in some factories became so elaborate and why they were believed to be so valuable. The discussion will highlight the achievements of the Cadburys and of John Patterson of the NCR in providing recreational opportunities in the 1890s and 1910s that were unprecedented in the variety of spatial planning, aesthetic and recreational opportunity. It will also suggest that in some respects, despite the gender segregation in the gardens and allotments, the treatment by these companies of their female and child employees was progressive

by the industrial standards and, in some ways by the social standards of the day. This chapter will argue that the making of gardens and recreation grounds at factories was not simply a power struggle between labour and capital and nor was it dominated by gender politics or any other single issue, but it was about a very complex series of social and economic relations of which these factors were a part.

By the early 20th century, a minority of industrialists were providing the kinds of social facilities at their factories like music, dancing and horticulture that were becoming the norm in social and cultural life amongst the urban working classes. It is important to stress however that gardens and recreation grounds were not the norm at most factories in this period. Even by the 1930s, factories like Cadbury and the NCR were still considered to be objects of some wonder and awe.¹⁰⁰

Open spaces and rational recreation

The appearance of recreation grounds and gardens at some factories that gathered momentum after 1880 paralleled in most respects the objectives of diverse voluntary and municipal initiatives that had campaigned for and provided access to open spaces, more attractive cities and better leisure facilities since the mid-19th century in Britain and the later 19th century in America. Driven from many quarters, from national and local government, the medical profession, education, the church, philanthropy, the civic movement and later from professionals like psychologists, planners and landscape architects, the general agreement was that industrialisation and urbanisation had sapped the strength and moral fibre of the working man and woman and their

¹⁰⁰ Humphrey Spender's photographs of Bolton (1937-8) taken at the request of Tom Harrison of the Mass Observation Archive, are a reminder that typical urban factories were not landscaped. See Humphrey Spenders 'Worktown' on the Bolton Museum's website (<http://boltonmuseums.org.uk/index.html>, accessed 16 May 2010)

children and that programmes of recreation in well provisioned clubs, community centres, parks and sports grounds were essential to shape the human body and mind to meet the demands of a modern industrial world.¹⁰¹

The leisure activities that took place in the factory gardens were organised and supervised within the remit of 'Rational Recreation', a theory and practice that was a catalyst to the public spaces and other reform movements, 'to forge more effective behavioural constraints in leisure.'¹⁰² Reformers recognised that industrialisation had put pressure on public space and many believed that a lack of open and other community space had driven people into the pubs and other institutions regarded as profane. The new public parks with ample space for sport for example, would encourage the right kind of recreation and not become the kinds of pleasure gardens of the type that had developed in 18th-century England like Vauxhall and Cremorne that by the early 19th century had become associated with loose behaviour.¹⁰³ The right kind of public space would encourage rational and respectable recreation. As the writer of an 1847 guide to Birkenhead suggested: 'It has justly been observed that in the same proportion as sources of innocent amusement and healthy recreations are provided for a people in the same proportion do they become virtuous and happy.'¹⁰⁴

¹⁰¹ These included the American Physical Association, founded in 1885, the American Civic Association founded in 1904 and the Playground Association of America founded in 1906 (refounded as the Playground and Recreation Association of America in 1911 and the National Recreation Association in 1930.) In Britain organisations like the Metropolitan Public Gardens Association campaigned for more parks and playing fields and policy for these became more systematic with the Town Planning Act of 1909. The National Playing Field Association was founded in 1925 to promote open space for sport.

¹⁰² Bailey, *Leisure and Class*, 177 and Bailey, P. *Popular Culture and Performance in the Victorian City* (Cambridge, 1998), pp. 21-6

¹⁰³ There were some highly popular pleasure gardens that were not subject to municipal control. The privately owned Sunny Vale Pleasure Gardens at Calderdale, Halifax opened in 1883, attracted 100,000 visitors each year. Attractions included boating, a maze and a helter-skelter, open-air dancing, concerts, a miniature railway, roller-skating and tearoom. Mitchell and Kenyon filmed the gardens. Calderdale Council website (www.calderdale.gov.uk/leisure/localhistory/glimpse-past/parks/sunnyvale.html, accessed 5 June 2007)

¹⁰⁴ Conway, *People's Parks*, 35

The leisure revolution

Historians agree that a revolution in sport and leisure took place from the 1870s amongst all classes, but it was particularly noticeable in working-class culture where formerly participation was limited due to low income and opportunity. In Britain, leisure time for the factory worker had been slightly improved after the introduction of the Ten Hour Act in 1847 (although not all factory owners followed the rules), followed by the Saturday half day in the 1870s, although many workers, like those in service worked many more hours. Bailey in his analysis of leisure in Victorian England, charts the new forms of recreation that were available to working classes, including music hall, association football and seaside holidays and he observes that by the 1890s, leisure was institutionalised through advertising and consumer capitalism to create what we now know as the 'leisure industry'.¹⁰⁵ Peiss, in her study of working-class women's leisure in New York at the turn of the century analyses the new types of commercialised and popular facilities, like dance halls, amusement parks and movie-theatres that concerned middle class reformers sought to discourage, by providing more 'respectable' forms of entertainment.¹⁰⁶

In the first two decades of the 20th century, there were growing expectations and demands for leisure facilities amongst urban dwellers, driven by rising wages and shorter working hours. In Britain, real wages rose by about 30% between 1913 and 1938 and by 1920 the working week had been reduced in some trades to 48 hours for

¹⁰⁵ Bailey, *Leisure and Class*, 2-5

¹⁰⁶ Peiss, K. *Cheap Amusements. Working Women and Leisure in Turn-of-the-Century New York* (Philadelphia, 1986)

women and young people and about 47 hours by 1938.¹⁰⁷ By 1935, in some trades like chocolate making and metal work for example, the working week had been reduced to 47 hours and a 43 or 45 hour week was common. The 1937 Factory Act made the legal maximum 60 hours or 55.5 hours in textiles and 48 hours for women and young people. By 1920, the majority of factories closed at lunchtime on Saturday and by the 1930s, a five-day week was usual. By the turn of the century many workers had up to one week's paid holiday per year and with the Holiday With Pay Act in 1938, about half of manual workers in the UK had paid holidays.¹⁰⁸

In the USA working hours were even more favourable. The working day had been shortened to ten hours in 1890, and 54.9 hours a week in 1910, a measure which effectively doubled leisure time from the previous 50 years. By 1940 the working day was reduced to eight hours and five days per week and for the first time, workers' leisure time exceeded work time. By this time, leisure time had more than tripled in 100 years and until the Depression average wages had risen steadily.¹⁰⁹ Cranz sums up the 1930s as the decade with 'the shorter work week, long weekends, daylight-saving time, improved automobiles and road systems, earlier retirement ages and longer lives and people had more time outside work and sleep as ever before.'¹¹⁰

Where the industrial revolution had largely separated work and leisure, changing working and living conditions had also increased leisure opportunities in times of full employment and stable pay. But like other social structures, leisure also was subject

¹⁰⁷ Jones, S. G. *Sport, Politics and the Working Classes. Organised Labour and Sport in Inter-War Britain* (Manchester, 1992), p. 44

¹⁰⁸ At Cadbury in the 1920s, workers had between three days and eight days paid holiday per year depending on length of service. A worker had to stay in employment for five years to gain eight days.

¹⁰⁹ Anderson, *Industrial Recreation*, 14-15

to reforming measures which strove to influence the choices of the working classes by providing 'rational' recreations that were disciplined, respectable and conducive to health and social and mental betterment.

Metcalfe in his fascinating study of leisure in the mining communities of the north east of England from 1820-1914 shows how from the late 1860s there was a 'massive' expansion in the number of facilities for leisure activities, a leisure revolution in the miners' lives, largely organised from within the communities and within the spirit of rational, respectable recreation. The early 1900s saw a significant expansion of leisure facilities in these communities including ballrooms and theatres for visiting theatrical groups and later for silent films. By 1914, the town of Ashington had five theatres and picture halls. Music was important in the lives of the miners from at least the 1820s with bands and choral singing an integral part of village life, but later in the century, opportunities for participation were greatly enhanced with new performance spaces like community halls and parks.¹¹¹ Helen Meller in her study of Bristol life states that 'Music was central to life' in the community in the second half of the 19th century.¹¹²

Dancing, which had always been popular became an 'all consuming passion' by the first decade of the 20th century. Assisted by the tendency for less formality between the sexes, ballroom dancing, once the preserve of the upper classes, became a craze in the 1890s, followed by tango-mania in 1911-13, the foxtrot in 1914 and American

¹¹⁰ Cranz, G. *The Politics of Park Design: A History of Urban Parks in America* (Cambridge MA, 1982), p. 106. See also Knapp, R.F. 'Municipal Recreation: Background of an Era' *Parks and Recreation* VII: 8 (August 1972), 14-19, 44-52

¹¹¹ Metcalfe, A. *Leisure and Recreation in a Victorian Mining Community: the Social Economy of leisure in North East England 1820-1914* (London and New York, 2006), pp. 24-28

¹¹² Meller, H. *Leisure and the Changing City 1870-1914* (London, Henley and Boston, 1976), p. 219

ragtime after the War. Roberts reveals how by the end of the 19th century, dancing was taken seriously by working women who could afford lessons and balls. Dancing became a mania amongst all classes by the 1920s - dance halls were common and companies, churches and clubs held dances wherever space was available, although they tended to be very strictly controlled in places that considered themselves respectable.¹¹³

Metcalf's example is taken from only one industrial district in Britain, but in towns and cities the quantity of leisure facilities of all types had ballooned, the most popular amongst the working classes being the music hall, and later the picture house, and the pub, or saloon. In America, saloons provided social centres and free meeting places and were often the only public places that provided refuge from busy streets¹¹⁴ but in large towns or cities, 'cheap amusements' were common or widespread.¹¹⁵ But there was great concern that working men and women enjoyed leisure too much, particularly drinking and sports,¹¹⁶ that music halls, dance halls and amusement parks encouraged promiscuity and that too much leisure time was spent on the street.¹¹⁷ In Britain, reformers attempted to close music halls, censor them or encourage more respectable activities, although Bailey argues that by the 1890s, music halls had reformed themselves, not for moralistic reasons but commercial ones.¹¹⁸ In America, reformers campaigned for more respectable use of free time, but with limited success in large cities where the quantity of entertainments was against them.¹¹⁹ It was in this

¹¹³ Roberts, E. *A Woman's Place. An Oral History of Working-Class Women 1890-1940* (Oxford, 1984), pp. 69-70. For the 'dancing madness' in early 20th century America, see Peiss, *Cheap Amusements*, Chapter 4.

¹¹⁴ Knapp, 'Municipal Recreation', 19

¹¹⁵ Peiss, *Cheap Amusements*, Chapter 7

¹¹⁶ Harris, *Private Lives*, 134-5

¹¹⁷ Knapp, 'Municipal Recreation', 19

¹¹⁸ Bailey, *Leisure and Class*, 154

¹¹⁹ Peiss, *Cheap Amusements*, 8

context that leisure opportunities like music, dancing, theatre and horticultural shows in factory grounds took place with the founding of clubs and societies, run by the workforce but using land and facilities provided by management so by default, although the workers ran the clubs, they lacked the freedoms that they might have had in their own institutions outside work, like the friendly societies, community centres, pubs and saloons.

Amateur theatre was another activity that was fairly regularly seen in the factory gardens that featured strongly in the leisure revolution, particularly in Britain. For example, dramatic societies had appeared by the late 1880s in the mining communities of northeast England, with a broad, though rational repertoire¹²⁰ and according to John Stevenson, drama groups were flourishing across Britain by the early 20th century in clubs and community centres.¹²¹ Robert Graves and Alan Hodge have shown that amateur theatre became even more popular in Britain in the 1930s despite the advent of the cinema, with nearly 40,000 drama societies in 1936. People in towns, villages and suburbs all participated, encouraged by the Women's Institutes and now also by a more liberal Church.¹²² To compete, or to meet local demand, many factories had dramatic societies with readings and performances taking place in the company dining rooms, welfare association building or an assembly hall.¹²³

Gardening and horticulture

¹²⁰ Metcalfe, *Leisure and Recreation*, 52

¹²¹ Stevenson, *British Society*, 417

¹²² Graves, R. and A. Hodge *The Long Weekend: a Social History of Great Britain 1918-1939* (London, 1940), p. 348. The British Drama League was founded in 1919 'to promote a right relation between drama and the life of the community'.

¹²³ At the Spirella Company in Meadville Pennsylvania, theatricals and music were amongst the many activities employees could choose from in their Association Hall (the factory had no garden space as it was in the centre of town, but used the local parks for recreation).

A popular activity of the leisure revolution that tends to be overlooked, but one that became a favourite amongst blue-collar workers as well as the more privileged classes, was gardening. Between the Wars, gardening became more than ever before a social as well as a practical activity through the burgeoning horticultural clubs and societies.¹²⁴ Ross McKibbin affirms that in Britain between the Wars, four million new gardens were established, about 70% of gardeners were manual workers (by 1949) and horticultural and gardening clubs were amongst the largest in the new estates.¹²⁵ This was partly due to a greater accessibility to gardens as most new suburban houses were built with large gardens, although flat dwellers were dependant on the proximity of an allotment. Reformers viewed nature and outdoor exercise as obvious panaceas to urban life and work, but horticulture had the additional advantages of supplementing the family budget, providing satisfying and healthy work, and even, in the view of reformers, elevating the mental and moral fibre of the workpeople. *The Gardener's Chronicle* in 1912 quoted a speech made by the President of the Scottish Horticulture Society in which he claimed:

It is largely to horticulture that we must look as the great ameliorating and refining agent which will raise to a higher moral plane the masses of our fellows who are, perforce, compelled at present to live under conditions which are not only a menace to public health but a disgrace to our civilization and which are rapidly deteriorating the race.¹²⁶

The encouragement of gardening and access to open space was a vital part of social reform, for temperance and the strengthening of character as well as for sustenance and health.¹²⁷

¹²⁴ Stevenson, *British Society*, 400

¹²⁵ McKibbin, *Classes and Cultures*, 196

¹²⁶ Jordan, H. 'Public Parks, 1885-1914' *Garden History* 22:1 (1994), 85-113

Recreation at factories

By the 1890s in Britain, when the first of the factory pleasure gardens began to appear, the types of recreational activities like music, dancing, theatre, fetes and horticultural shows that took place in the gardens would not have seemed unusual to the workforce since many urban people, but by no means all, now had access to a public park or garden,¹²⁸ some had an allotment and music and theatre culture was very lively through the music hall, working men's club, other clubs and societies and the pub. Nor would the idea of cultural activities at work have seemed unusual to everyone, since from at least the 1840s in Britain, participation in music and drama was possible at some factories and was very common in larger industrial communities like the mining villages of North East England.¹²⁹ The surprising factor for the employees and visitors at these new model factories would have been the scale and relative sophistication of the spaces made available for these activities at work – not just the company dining hall or the works yard, but outdoor spaces like a designed formal garden in the case of the Spirella Corset Company and Ovaltine, or acres of beautiful gardens and woodland, in the case of Cadbury and the NCR. For the women employees especially, the easily accessible facilities and amenities were unusual, for despite the increasing participation of women in public life, many cultural activities were still dominated by men. The pub in the UK and the saloon in the US, the most

¹²⁷ Biggs, *The Rational Factory*, 69

¹²⁸ Municipal parks had begun to appear in Britain from the 1840s. In America the public park movement flourished from the 1870s.

¹²⁹ Metcalfe, *Leisure and Recreation*, 50-6. At New Lanark, Robert Owen introduced dancing, singing and recitation at the New Institution for the Formation of Character (1809-16) and the school (1817). See Davidson, 'A Quest for Harmony'.

popular social spaces for the working-class male were largely male preserves.¹³⁰ Recreational activities for women in public parks and gymnasia were only just becoming available at the end of the 19th century,¹³¹ so the industrialists who provided facilities for women in the 1890s were in the forefront of women's emancipation through recreation. For teenage workers, recreation and play at the factory filled an important gap between school and adulthood before social centres for recreation became available to them. (No doubt the drill exercises and allotment gardening for youths also assisted in maintaining discipline.) For the male worker too, the availability of park or garden space during the working day would have been a relative luxury. For him, the emphasis at the factory was on space for physical activity rather than gentle exercise and aesthetic pleasure, but there was still plenty of space for informal lounging on the playing fields should that be desired. However, cultural activities organised at factories like theatre and dancing, were not popular with all classes of employee, for only 'respectable' forms were allowed. Some employees felt patronised by 'do-gooding', particularly when they felt compelled to join in.¹³² Segregation of the sexes in the factory garden spaces would not have been particularly popular either, even though gender specific activities and chaperoning were common, but by the 1920s, informal meetings with the opposite sex were becoming more acceptable. Spatial segregation of the sexes was less of a feature of the company

¹³⁰ Claire Langhamer argues that although there was an increase in unaccompanied and single upper-working-class women frequenting pubs in the 1920s, the *average* female drinker between the wars was working class, over 40 and married. Langhamer, C. "A Public House is for all classes, men and women alike." *Women, Leisure and Drink in Second World War England? Women's History Review* 12:3 (2003), 423-443. See also Rosenweig, R. *Eight hours for what we will: Workers and Leisure in an Industrial City, 1870-1920* (Cambridge, 1983), pp. 44-6, p. 63

¹³¹ Conway, *People's Parks*, 191

¹³² Lena Harvey Tracy, the welfare secretary at the NCR, was not popular with many of the women employees. Although welfare at the factory did not cause the strike of 1901, Tracy lost her position following the strike. Nelson, 'The New Factory System'

parks after the First World War except in the obvious situations like team sports and changing rooms.

Healthy rest and play in the factory gardens

Evidence from photographs suggests that the factory gardens provided space for the aesthetic enjoyment of nature and a sanctuary for rest and refreshment during the working day, although realistically the rest periods of ten, or sometimes fifteen minutes morning and afternoon that were offered in the better factories, would allow for little other than a visit to the lavatory and a quick drink. Photographs of the Bata factory at East Tilbury show the workers sitting on benches outside the factory where tea was served during their ten minute break,¹³³ and at Cadbury, Rowntree and Spirella, female workers can be seen sitting in their gardens during their rest periods. **[Fig. 4.1]** Roof gardens were also popular places of retreat. Female workers on the roofs at the Heinz factory at Pittsburgh and at the Jacob's factory in Dublin can be seen in photographs walking or relaxing on benches.¹³⁴ **[Figs. 4.2, 4.3]** The Shredded Wheat factory at Niagara Falls, where the workers had two rest periods of fifteen minutes per day, had a viewing deck on the roof of the factory from which to see the upper Falls, although there is no evidence that the workforce had access to this for all the reports suggest that it was the highlight of the famous Shredded Wheat visitor experience.

¹³³ 'Playtime' *Bata Record* 101 (15 May 1936), p.1, BRRC

¹³⁴ Meakin, *Model Factories*, 94-5. The women on the Heinz factory roof are office, not shop floor workers, but in another source the latter are seen to have access to the roof garden. Foster, D. and Kennedy, J. H.J. *Heinz Company. Images of America. Worker's Utopia* (Charleston, 2006)

The Cadbury, Rowntree and NCR factories all had segregated spaces where gender-specific activities were offered. The Girls' Grounds at Cadbury, part pleasure garden and part recreation ground had facilities for informal play for the younger girls, like swings and the 'giant stride'¹³⁵ and for the women, tennis courts. [Fig. 4.4] The women's garden at the Rowntree factory in York had seats and rose arbours to create privacy. [Fig. 4.5] After 1904, the NCR factory had an area of land designated for women near the women's club and dormitory. The women had their own tennis court and a pergola was constructed there to add 'taste' and respectability to the space. [See Fig. 3.17]

Photographs are likely to exaggerate the amount of time spent in the gardens, which in any case was dependent on clement weather. Photographs showing the Cadbury 'Angels' in their recreation ground suggest that they had plenty of leisure, but the grounds would have been several minutes' walk from the workrooms. Realistically therefore, only a visit at lunchtime was possible. Even the lunch hour was barely enough time to eat a meal and go dancing in the Girls' Grounds, although the booklet 'A Factory and Recreation' produced by Cadbury claimed; 'The hope that the girls would take advantage of the gardens instead of remaining in the dining rooms during the dinner-hour has been fully realized.'¹³⁶ It is likely that enjoyment of the Girls' Grounds took place mostly on fine days and so the benefits of the gardens for relaxation have probably been embellished. In just the same way, the benefits of parks for working people were overstated, because even after the introduction of the five

¹³⁵ The giant stride was common in parks in the late 19th century. It looked like a maypole but each child would run around it hanging onto a rope or chain. With enough speed, it was possible to 'fly'.

¹³⁶ Cadbury *The Factory and Recreation* (Bournville, 1925), p. 19, CB

and a half day week in the 1870s, for most of the year use was only possible, or desirable, on summer evenings and on Saturday and Sunday afternoons.¹³⁷

The gentler activities for rest and exercise in the factory gardens therefore paralleled those that took place in the public parks by the turn of the century, where recreation, except on special occasions like park openings tended to be 'rather sober'.¹³⁸ I have found no evidence as to rules of use or behaviour in the factory gardens with the exception of the 'Rules of Use' for the Men's Recreation ground at Cadbury, where clearly the activities allowed there were 'rational' because the following were banned:

pigeon shooting, horse racing, coursing, dog racing, nor any games or sports in which competition shall take place for monetary prizes, nor shall any intoxicating liquor be sold or bought there.¹³⁹

The garden Arcadia: music, dancing and drama

The cultural activities provided in the factory grounds met the strict criteria of respectability demanded by reformers. The Cadbury Music Society was founded in 1902 and a full time Director of Music appointed by the firm in 1908 when the 185 members put on seven public concerts (inside and out) with an average attendance of 1200. (Although membership of the society was small in a workforce of approximately 6000, the concerts were generally very popular.) The Cadbury workforce continued to be encouraged in their enjoyment of music, for a leaflet inserted into the *Bournville Works Magazine* in May 1934, announced three forthcoming summer concerts, two evening concerts at the Rowheath

¹³⁷ Park use appeared to change little in the first three decades of the 20th century. The Mass Observation 'An Enquiry into People's Homes' File Report 1654 (1943), p. 25, discussed in the previous chapter, revealed that: 'although parks were liked by the majority of people, they do not use them to an appreciable extent except for the occasional stroll in the evenings, or on Sunday. But they like them for their children.'

¹³⁸ Conway, *People's Parks*, 186

¹³⁹ 'Minute book Indenture', no date, CB, 350 001804

grounds and one mid-day concert in the Girls' Grounds.¹⁴⁰ [Fig. 4.6] Open-air concerts were by no means a novelty in working-class life and were known to draw the crowds, because from the latter part of the 19th century, concerts could be enjoyed in public parks on summer weekday evenings and, on Sundays, events that were designed to be morally improving.¹⁴¹

Evidence of musical activities at other works is more limited. We know that at the Shredded Wheat plant at Niagara Falls there was a musical association, a concert band and a choral society but it is not known whether they performed outside.¹⁴² At the Welwyn works, the Wheat Pipe Band was famous in the town for they often performed at outdoor events in the garden city playing instruments and wearing uniforms supplied by the company. The Bata Company in the 1930s also had music – at the very least a dance band, which played open-air concerts on the sports ground in June of 1934 and probably at other times.¹⁴³ **[Fig.4.7]**

The company brass band and dance bands were frequently in demand for the growing popularity of dancing at the factory. Music and dancing at factories originated at New Lanark with Robert Owen's educational experiments¹⁴⁴ **[Fig. 4.8]** and ballrooms were known at a handful of factories in the first half of the 19th century, but organised dancing became common at factories from the first decade of the 20th century.

Dancing at the factory was encouraged not only for fun but also as another form of exercise for women and children. At the Heinz factory in Pittsburgh, a tower on the

¹⁴⁰ Cadbury *Bournville at Work and Play* (1926) and *Information for the use of Guides and Visitors* (1926), CB

¹⁴¹ Conway, *People's Parks*, 202

¹⁴² *The Wonders of Niagara: Scenic and Industrial* (Niagara, c1905)

¹⁴³ See *Bata Record* (1 June 1934 and 7 September 1934), BRRC

¹⁴⁴ Davidson, 'A Quest for Harmony'

roof garden included a music room fitted out with an organ, which was played after lunch for dances.¹⁴⁵

The theory that dancing was good for physical and mental health had developed at the end of the 19th century partly from research in the new academic disciplines of psychology and physiology.¹⁴⁶ Gagen argues that the theories of Stanley Hall and George M. Beard, particularly those on the importance of play in the open air and dancing were highly influential, even ‘inestimable’ in the movement for recreation in both Britain and America in the first decade of the 20th century.¹⁴⁷ Stanley Hall argued that exercise must be vigorous, regular and wholesome and that discrete exercises for girls should focus on gymnastics and dancing.¹⁴⁸ This explains why male factory workers around 1900 performed ‘drill’ style exercises on the grounds, while female workers exercised to orderly rhythmic routines and why women were encouraged to dance in the dinner hour. Edward Cadbury in his book *Experiments in Industrial Organisation*, (1912) a partial and not very scientific contribution to the latest theories on industrial welfare, explained that the syllabus of the girl’s voluntary class for morris exercises, included instruction in Morris dancing, folk songs and national dances. He also remarked that boys’ morris dancing lessons were ‘...very successful, and their effects on the moral and physical development of the boys have been most marked.’¹⁴⁹

¹⁴⁵ Meakin, *Model Factories*, 96

¹⁴⁶ Gagen, E. A. ‘Making America Flesh: physicality and nationhood in early twentieth-century physical education reform’ *Cultural Geographies* 11 (2004), 417-442

¹⁴⁷ *Ibid.*, p. 426

¹⁴⁸ Hall, S. *Adolescence: its Psychology, and its Relation to Physiology, Sociology, Sex, Crime, Religion and Education* (2 vols., New York, 1904)

¹⁴⁹ Cadbury, *Experiments*, 33-5

It is impossible to gauge the popularity of outdoor dancing in the Girls' Grounds at Cadbury in the early 20th century but it could be regarded as a relatively creative and open-minded policy for dancing in controlled public spaces like parks, particularly open-air dancing, was not common at this time, at least in Britain. There is some evidence of dancing saloons in early parks – the Woolsorters Baths and Park at Bradford had a dancing saloon in the 1850s¹⁵⁰ but these were indoor spaces and I have so far found no other evidence of outdoor dancing in the parks except for very special occasions like the park opening celebrations.¹⁵¹ However, dancing in parks would have been regulated in much the same way as in the Girls' Grounds at Cadbury, where dancing was relatively restrained and segregated until the 1920s.¹⁵²

[Fig. 4.9] Dancing at Cadbury was therefore organised for largely the same reasons as the dancing at Robert Owen's New Lanark 100 years earlier - for moral and physical improvement.

By the 1900s in America, folk dancing had been introduced into the parks, a dance form considered to be more respectable than dance hall dancing and later, social dancing was introduced, perhaps to compete with the dance halls, but dancing took place mostly in the park dancing pavilion. Folk dancing was popular at Bournville for a short time in 1908 and was then revived in 1923 with the formation of a Folk Dance Society, which was soon 'flourishing'. By the 1920s, the dance pavilions in the US parks were very well attended. A small fee was charged and male and female chaperones were provided.¹⁵³ Perhaps the American dance pavilions inspired the idea of dancing in the pavilion at the Spirella Company in Letchworth that was discovered

¹⁵⁰ Conway, *People's Parks*, 54

¹⁵¹ *Ibid.*, 186

¹⁵² T.B. Rogers in his history of Cadbury, *A Century of Progress* published in 1931, remarked that '...visitors from the Men's side are invited [to the Girls' Grounds at Cadbury].', 45

by the visitor to the sports ground that opened this chapter, but by the 1920s, American dance fever had hit Britain and dancing took place outside as well as in. In the 1930s, the Bata pavilion had an outdoor dance platform¹⁵⁴ and, even at Cadbury, spirited modern dances were taking place on the lawn at the Rowheath grounds accompanied by the works band for it was now acceptable for men and women to dance together in the works' grounds.¹⁵⁵ **[Fig. 4.10]** By this time facilities at many factories for dancing were elaborate for many had state-of-the-art ballrooms with sprung floors so the dancing craze could be indulged in throughout the year.

Gardens have at least since the Renaissance provided Arcadian space for theatre and performance¹⁵⁶ but these spaces have largely been the preserve of the well off and the working classes had to make do with the village green or common. Although travelling players were occasionally seen in the public park, there is no evidence of formal open-air performances taking place in parks for the general public, although it is likely that this did happen from time to time. However, at Cadbury outdoor theatre became at least an annual event in the first decade of the 20th century for the company had an abundance of outdoor space for theatricals using the pergola terrace for some performances, or when larger audiences were expected they had the benefit of the natural amphitheatre in the Girls' Grounds that could seat several thousand spectators. **[Fig. 4.11]** An audience of over 500 saw the first outdoor public performance of the Dramatic Society on 11 June 1913 - a masque *Cophetua* by the poet John Drinkwater (1882-1937), who became well known for his historical dramas - and scenes from

¹⁵³ Cranz, 'Reform Parks'

¹⁵⁴ Although the workforce was not always keen to dance on company premises. The *Bata Record* of 6 July 1934, reported that although open air dancing when first instituted by the workforce was initially very popular, now 'apathy' had set in and interest had waned.

¹⁵⁵ *Bournville. An Invitation* (1937), pp. 56-7, CB, 000 000024

¹⁵⁶ See Graham, D. 'Garden as Theater as Museum' in Graham, D. *Rock my Religion. Writings and Art Projects 1965-1990* (Cambridge, MA, 1993), pp. 286-307

Twelfth Night.¹⁵⁷ The NCR also had an outdoor amphitheatre at their Hills and Dales Club. The NCR Chorus and Orchestra entertained a crowd of almost 1200 at the opening on 27 July 1916.¹⁵⁸

The NCR amphitheatre was perhaps inspired by the Cadbury example, although there were by this time a small number of well-known private outdoor theatres. The industrialist Pierre S. Du Pont had made one in his garden at Longwood, Pennsylvania, which was first used in 1914 and the private boy's school, Bradfield, near Reading (UK) had a Greek theatre from 1890. Although these theatres were opened for public performances, open air theatre at the Cadbury and the NCR amphitheatres were a novelty for factory workers in the early years of the 20th century.

Pageants, festivals or fêtes were also promoted at factories to reinforce company culture and a sense of place, and the larger factory gardens as well as the owners' gardens provided space for these. [Fig.4.12] Corporate rituals like feasts to celebrate important events in employer's families like birthdays, weddings or coming of age had been a feature of factory social life, but firms like Cadbury excelled at the quantity and variety of events initiated by and performed by the workforce.¹⁵⁹

Pageants and masques were staged four times between 1908 and 1914 and fêtes sometimes more frequently and important anniversaries were celebrated in style.¹⁶⁰

¹⁵⁷ See Williams, I. A. *The Firm of Cadbury* (London, 1931), p. 180 and *Bournville at Work and Play* (Bournville, 1926), CB

¹⁵⁸ *NCR News* (August 1916), pp. 22-3, NCR.DH

¹⁵⁹ Joyce, *Work, Society and Politics*, 179-185

¹⁶⁰ Williams, *The Firm of Cadbury*, 180

The Cadbury pageants and masques were undoubtedly a symptom of the ‘Pageantitis’ that ‘swept’ across England between 1905 and 1914 and spread to America. Deborah Sugg Ryan has shown that during these years at least 40 pageants were staged in parks and other open spaces in towns and cities across Britain and more than 130 during the same period in the USA. She argues that pageants were expressions of the emergence of ‘popular modernism’ in which the idea of tradition was reinvented as an expression of the modern conditions of mass-leisure that crossed boundaries of gender and class.¹⁶¹ It is also likely however, that these elaborate public spectacles that mostly re-enacted past events and traditions were expressions or reassertions of civic and national identity in a period of change in the years before the First World War. The pageants and masques staged at Letchworth Garden City before 1914, in which workers from the Spirella factory participated, were designed to contribute to the new Garden City identity of community, liberalism and the ‘spirit of the place’.¹⁶² One spectator, reporting in the Spirella house journal recalls the ‘delightful freedom’ engendered by the ‘beautiful...open air’ setting of the pageant and its potential to ‘break through prejudice and arouse from lethargy both our national and civic life.’¹⁶³ The same spirit pervaded in the garden suburb Bedford Park, Chiswick (1875-81) where residents staged theatricals, tableaux and masques. As Walter Creese has argued, this love of role-playing was symbolic of affluence and leisure, but was also a protection against encroaching modernisation and modernism.¹⁶⁴

Similar events took place at some of the US factories including celebrations of the Fourth of July to foster national spirit and social unity. The celebrations in 1900 at

¹⁶¹ Sugg Ryan, D. ‘“Pageantitis”: Frank Lascelles’ 1907 Oxford Historical Pageant, Visual Spectacle and Popular Memory’ *Visual Culture in Britain* 8:2 (2007), 63-82

¹⁶² Miller, *The Garden*, 88, 106-8

¹⁶³ Hunter, D. ‘Folk Drama’ *Threads* (4 April 1909), 78-81, FGCHM

the National Cash Register Company lasted a whole week ending in a procession to Far Hills, the home of their president John H. Patterson. The 24-piece band led the procession, followed by, in order, the officers of the company, foreign delegates, district managers (each carrying an American flag), factory girls carrying red, white and blue umbrellas and finally factory workers wearing grey suits and broad brimmed straw hats draped with the American flag.¹⁶⁵ Pageants and other company events involved large numbers of employees and were likely to have crossed more boundaries of class and position since all departments across the factories were invited to contribute.

Horticulture in the factory gardens

One of the best routes to reform was thought to be by example and a factory, set in a beautiful landscape or at least surrounded by flowers and greenery created a model environment for the worker. Disraeli, in his novel *Sybil* published in 1845 set in an industrial village, made a point of the 'beautiful gardens [of the village], which gave an impulse to the horticulture of the community'.¹⁶⁶ Public parks performed the same function for elegant design and beautiful planting and not only lifted the spirits but taught the community about plants, good gardening practice and virtuous character traits. At the Spirella Factory in Letchworth garden city, an unusual horticultural success, the flowering after five years of the *Saxifraga Gigantia* on the factory roof garden, was written up in the company magazine to celebrate the gardener's achievement and to teach the merits of perseverance and patience.¹⁶⁷

¹⁶⁴ Creese, 'Imagination in the Suburb', 61

¹⁶⁵ *Social Service* 2:9 (September 1900), 14-19 in Brandes, *American Welfare Capitalism*, 79

¹⁶⁶ Quoted in Bailey, *Leisure and Class*, 55

For Spirella, gardening became a metaphor for business success. In ‘Our Harvest Home’, an article in *The Spirella Magazine* in October 1932, the author encourages their sales team to ‘gather in...The Fruits of Industry’ (more orders) before Christmas in the same way that the last of the fruit harvest is brought in before the first of the frosts.¹⁶⁸ [Fig. 4.13]

Many factories and factory villages had provided allotments for their workers from the early days of the factory system and continued to meet the high demand for plots in the early 1900s. At Rowheath, the new grounds for the Cadbury workers opened in 1926, three acres were set aside for allotments and the NCR had separate allotment gardens for different, age, gender and social groups. Factory horticultural clubs were some of the most popular (all of the case studies discussed here had one), the annual flower show was a high point in the social calendar and company magazines regularly published advice or even directives on horticultural matters.¹⁶⁹

The gardens advice given in the *Bata Record* was directed at householders who were under close surveillance by the company at least as far as their front gardens were concerned. In the same spirit of aesthetic and moral control as that of William Lever at Port Sunlight,¹⁷⁰ the Bata management took control of the front gardens of the residents in Bata Avenue, the first street to be built and visible to those visiting the factory. The first gardening column in the *Bata Record* of 1934 makes it very clear

¹⁶⁷ ‘The Stroller’s Shadow’ *Threads. The Spirella House Journal* IV: 42 (August 1931), p. 100, FGCHM

¹⁶⁸ *The Spirella Magazine* XXI:10 (October 1932), pp. 148-149, FGCHM

¹⁶⁹ *The Bounville Works Magazine* had a regular gardening column from its first edition in November 1902.

¹⁷⁰ At Port Sunlight, the residents paid the wages and costs of the large gardening staff employed to tend the village, which was a much larger percentage of the worker’s incomes than they would have chosen to spend themselves. See Fishman, *Urban Utopias*, 60

that residents who have planted against the guidelines must turn over their front gardens to the compulsory lawn;

The Housing Department is very appreciative of the charming way in which some occupants of the houses have laid out their front gardens with flower beds, and quite realise how hard it will come to them to have to conform with the rule that a lawn always must be sown in front of each house. Nevertheless, it is considered advisable that there should be uniformity in the interest of the estate as a whole. Roses will be grown later along the green verge and there will be opportunity for residents to plant privet hedges round their houses.¹⁷¹

To make up for the inconvenience, the firm would supply grass seed and sow the lawns for a small charge. The firm also stipulated two trees (a cherry and a rowan) per front garden, some of which are still there.¹⁷² Bata was another company where those in charge promoted gardening. Mrs Schmidt, the wife of the Bata managing director, offered cash prizes in the village's first gardening competition in July 1937. She and her husband (both keen gardeners) joined the sports and social manager and the head gardener to judge the competition.¹⁷³ No doubt the Bata residents were as keen on gardening as residents on other working-class estates but the competition must have been an opportunity for the management to keep an eye on those residents tempted to flout the rules.

Gardening for child workers had also been a feature of organisation in at least one model factory from the early 19th century.¹⁷⁴ Towards the end of the 19th century

¹⁷¹ 'Gardens of Bata Avenue' *Bata Record* (September 14th, 1934) p. 5, BRRC. The Bata estate was modernist in design and no doubt the dictates of modernism which tended to favour lawns and uniform symmetrical planting were at work here. Planting at the modernist Van Nelle factory near Rotterdam was similar. See Wilk, *Modernism*, 75.

¹⁷² The retired head gardener of Batatown told me that when the houses were sold off to residents in the 1980s, most of the new owners asked for the statutory trees in their front gardens, to be cut down. He regarded this as symbolic of freedom gained at last. Interview with Erik Allen, retired head gardener of the Bata Estate, 4 August 2007.

¹⁷³ 'Guineas for Gardens' *Bata Record* (11 June 1937), p. 1, BRRC

¹⁷⁴ At Styal near Manchester, the resident children were compelled to till the vegetable plot outside the 'Apprentice House' after their long day of labouring in the mill followed by schoolwork. Tour of Apprentice House, Styal, 5 August 2006.

gardening clubs for the younger factory workers were started in line with nationwide initiatives to teach children about gardening in community and school gardens.¹⁷⁵ Girls' and boys' gardens were provided at Cadbury, Rowntree and the NCR. The Cadbury firm took over the boys' gardening classes at Bournville from the Birmingham Education Committee in May 1912 and the Works Education Committee started a girls' gardening class which suggests a commitment at the firm to gender equality. However, gender-specific gardening was encouraged since each girl was also given her own plot exclusively for flowers with annual competitions to encourage competitive flower growing. (The evidence suggests that demand for gardens exceeded supply.)¹⁷⁶ [Fig. 4.14]

The merits of the more leisurely and aesthetic side of gardens and plants were also encouraged at the factories, either by well organised landscape and planting in the vicinity of the factory and office buildings or by the addition of pleasure gardens. Landscape departments managed the grounds and at some factories these were manned by a large staff - the Cadbury Gardens Department had 50 staff in the 1930s¹⁷⁷ and 59 in the 1950s - that also looked after the recreation grounds.¹⁷⁸ Apprentices were given thorough instruction in horticulture and the occasional treat. In May 1912, three apprentices were taken to the annual Royal International Horticultural Exhibition at Chelsea (now the Chelsea Flower Show). The head gardener, Mr Lodge remarked proudly that this was 'probably the largest exhibition

¹⁷⁵ See Lawson, L. *City Bountiful a Century of Community Gardening in America* (Berkeley, Los Angeles, London, 2005)

¹⁷⁶ At Rowntree, the men and boys gardened in 'allotments' with their utilitarian connotations, whereas the girls cultivated their 'gardens'.

¹⁷⁷ They were responsible for 110 acres of gardens and recreation grounds. See *Bournville Personalities* (1938). CB

¹⁷⁸ The large departments had a social life and culture of their own – the Gardeners' Department at Cadbury has its own bowling team. 'In Praise of Gardeners' *BWM* XXX:11 (November 1935), p. 393, CB

ever in Britain or the world!’ and that ‘the visit proved most instructive and useful.’

179

The smaller establishments employed at least one gardener, for example Spirella in Letchworth. Facilities for gardening at some factories were elaborate, including glasshouses and cold frames, tool stores and staff rest and mess rooms. The new greenhouses built at Cadbury in the 1920s greatly enhanced the Cadburys’ horticultural ambitions. They enabled the gardeners to supply the copious plants and flowers for the factory and office interiors described in Chapter 3 and like Rowntree, they grew cocoa. An article on ‘The Bournville Cocoa Tree’ in the *Bournville Works Magazine*, July 1936, acknowledges the firm’s debt to the Director of the Royal Botanic Gardens at Kew for his advice on growing the plant, which was by then thriving in the greenhouses.¹⁸⁰

At some factories, including Cadbury, the NCR Company and the Natural Food Company in Niagara Falls, the factory was set up as a model of gardening and gardening practice in the local community. Advice was dispensed and incentives provided through articles on gardening in the company magazine, competitions for the best gardens, lectures on landscaping and plant catalogues and other factory publications of gardening advice.

At the NCR, Patterson, with the support of John Charles Olmsted, his landscape architect, ensured that the local residents would follow his landscaping example. **[Fig. 4.15]** He began by starting a local improvement association, offered cash prizes for the best gardens and arranged with local nurseries to supply plants and seeds at

¹⁷⁹ *BWM X*: 7 (July 1912), p. 211, CB

favourable prices. Taking advice from Olmsted, he made a slide lecture on how to plant a lawn and he ‘named and shamed’ those who refused to conform to improvements by photographing their ill-kept lawns and showing them in public.¹⁸¹ He filled the factory with flowers and palms and gave prizes for the best-kept gardens in South Park.¹⁸²

To further encourage gardening amongst the workforce and other locals, the NCR produced several pamphlets of gardening advice and plant information and the Gardening Department sold bulbs, seeds and annuals at a nominal charge. Patterson set himself up as the district’s leading authority on gardens and landscapes and he toured the local Sunday schools, clubs and other improvements associations with lantern slide lectures on landscaping.¹⁸³ In the spring months, a series of lectures on landscape gardening given at the factory was offered to all workers and local residents.¹⁸⁴ **[Fig. 4.16]**

The Natural Food Company very actively promoted the art of landscape gardening in Niagara, offering cash prizes for the best results in landscaping and planting to any resident of the city. This was undoubtedly inspired by the NCR, since the CEO, Colonel Deeds, had formerly worked in Dayton and Perky the owner had inspected the NCR, and declared that when he returned to his factory he intended to adopt ‘...everything that I have learned here that can be applied to our own situation.’¹⁸⁵

The June 1901 number of the *National Magazine* of Boston, Massachusetts claimed

¹⁸⁰ *BWM XXIV*: 7 (July 1936), pp. 210-11, CB

¹⁸¹ J. M. Good *The Work of Civic Improvement* (no date), p. 12, NCR.DH

¹⁸² Gilman, *A Dividend to Labor*, 230

¹⁸³ Lawson, *City Bountiful*, 104-6

¹⁸⁴ NCR *The Garden Book* (Dayton, 1900s); *NCR Nursery Book and Catalogue of Trees, Shrubs and Hardy Plants* (Dayton, 1906), NCR.DH

that the influence of the Natural Food Conservatory did not cease with the erection of a handsome building, but that the company was now helping ‘make Niagara one of the most beautiful cities in the world.’ A photograph showing a large group of children standing outside the factory is captioned ‘The children who are learning how to make homes beautiful, through the medium of the Natural Food Company’s garden competition’ although the truth of this is questionable, since the photograph appears to have been taken in mid winter.¹⁸⁶

The Natural Food Company Landscape Department supplied seed to the townspeople free of charge, helped to make gardens at the local schools and awarded prizes to any resident of the city for the best examples of landscape gardening. The department also published several pamphlets including in 1902 a *List of Trees Shrubs and Vines, suitable for sidewalk planting, Season of 1902-3* and *Landscape Gardening*. The latter, which begins with a quotation from Francis Bacon, gives planting, pruning and watering advice and lists the plants and seeds that were provided by the company free of charge, as well as advising on the available gardening prizes. Borrowing ideas from the Olmsteds, via the NCR, the Natural Food Company was attempting to improve public taste in gardening for the booklet illustrates good and bad planting schemes in front gardens, taken directly from the NCR ‘Landscape Gardening’ lecture. The unnamed author disapproves of what he calls ‘The Nursery Type of Planting’ – trees and shrubs planted at intervals over the whole space with little design. The preferred scheme shows trees and shrubs planted around the border of the space, embracing the space ‘artistically’; ‘plant in masses, not isolated’; ‘avoid straight lines’, and preserve open lawn areas. **[Fig. 4.17]** The suggested planting scheme was suggestive of styles

¹⁸⁵ Perky, H. quoted in Tracy, *How my Heart Sang*, 155

¹⁸⁶ ‘The Natural Food Conservatory’ *The National Magazine of Boston* (June c. 1901), KA

that were being promoted in the latest gardening magazines for suburban gardens, broadly the loose informal style of planting popularised by Frederick Law Olmsted and the advocates of the picturesque.

The author of the Shredded Wheat Company's *Landscape Gardening* makes a point that sums up effectively this discussion of gardening practice at factories in the late 19th and early 20th centuries:

The interest in Civic Improvement (*sic*) is steadily growing and the work is being carried on in various cities with great success. The most striking example of the effectiveness of this work is the City of Dayton, Ohio, where a few years ago a large manufacturing concern [the NCR Company] took up the work of Civic Improvement and the existing conditions have been greatly changed and now various portions of that city resemble a garden spot.

Historians have long acknowledged the importance of industrial villages as models for the Garden City Movement and thus for subsequent suburban planning policy, but the role of the factory itself and its landscape department in civic improvement has not been sufficiently acknowledged.¹⁸⁷ The active involvement by factory staff in beautifying their neighbourhoods were not just isolated examples, for the evidence from the Shredded Wheat Company booklet suggests that the companies saw themselves as part of the civic movement in which industry had a valuable role to play in mentoring and promoting civic improvement. Some landscape architecture firms, particularly the Olmsteds, supported improvements to the industrial environment, as they began to work on factory landscapes from the 1880s.

Conclusion

Images of contented employees using the attractive pleasure gardens and recreation grounds to the full were naturally exploited by publicity and public relations departments and can be seen in promotional material and to some extent in

advertising. The booklet *Cadbury at Work and Play*, published in 1926, recorded a summer evening at the Rowheath grounds, which uses similar language and imagery as those chosen by the visitor to the Spirella recreation grounds mentioned at the beginning of this chapter.

Rowheath is a pleasant scene enough on a summer evening, when, flooded with sunshine, its fields are alive with play of all kinds, its lawns gay with dance and music and its gardens a peaceful resting place for workers with their families. It affords a sight which, as the counterpart of work, is eloquent of industry's full meaning in the life of a people – and a sight which ever-makes (*sic*) reflective Bournville folk realize their good fortune in a location where fields and beauty are at hand.¹⁸⁸

Where industrialisation had separated work and leisure, philanthropic industrialists sought to integrate them again in their attempt to make the working day less onerous and the factory worker more contented and loyal. The activities that took place in the factory gardens and parks that included sports, music, theatre and pageants, company events and gardening, fell within the remit of 'Rational Recreation'. The amenities offered or organised by the employees themselves provided some of the recreational opportunities that were in demand in the 'leisure revolution'. Access to garden and park space during the working day was a relative luxury and it is likely that some employees were given access to certain activities in the workplace that would not have been easily accessible or affordable elsewhere. These points will be revisited in Chapter 8. The next chapter will look in more depth at how the scope and variety of activities made available by the spaces of factory landscapes, developed and changed into the 1920s and 1930s with the making of a new style of company recreation ground.

¹⁸⁷ Research is developing on the role of municipalities in Britain on their promotion of horticulture between the Wars. See Le Bas 'The Making of a Socialist Arcadia'

¹⁸⁸ p. 38

Chapter 5: Mobilising the Modern Industrial Landscape for Sports and Leisure

The discussion of the provision of factory landscapes has so far presented an overview of the types of landscaping present at industrial sites in the late 19th and early 20th centuries and the non-sporting leisure and recreation facilities available to the workforce. This chapter and the next will look in more detail at the design of company recreation parks that were made in the first four decades of the 20th century and were conceived and designed according to rapidly developing theories of sports and recreation and the kinds of parks that were required for successful modern industrial nations. By the 1920s and 1930s recreation provision at large companies, while not yet the norm, had become common in Britain and America.¹ However, the sophistication of these facilities differed considerably from company to company. Some provided recreation grounds that offered, for example, football, baseball, cricket, hockey bowls and tennis, while a few gave to their workforce a park of equivalent scale and sophistication to those being provided by municipal authorities, including children's playgrounds, pleasure gardens, extensive playing fields, large pavilions, tearooms, golf courses, open air swimming baths and more.

This chapter will show why the design of municipal parks and recreation grounds changed in the late 19th, early 20th centuries to become recreation, or reform parks and how between the Wars, park design reached a peak of variety and amenity, to meet the needs of the modern industrial society with its expectations of leisure. This will provide the context for assessing the development of the idea of industrial recreation

¹ Tishler, W. H., (ed.) *American Landscape Architecture: Designers and Places* (Washington DC, 1989) and Mozingo, *Campus, Estate and Park*

and the kind of parks and playing fields that industries, seeking the best facilities for their workforce, sought to develop using professional garden and landscape architects. The discussion will include a consideration of the benefits of industrial recreation to blue-collar female workers and to children in the context of changing attitudes and practices in women's and children's welfare in the period.

Parks for recreation, health and opportunity

By the end of the first decade of the twentieth century the type of park required to meet the needs of industrial nations had become fully articulated in Britain and America. More parks were made in Britain between 1880 and 1914 than at any other time² and in America, park making accelerated from around 1890.³ In the UK, space for competitive sports had been increasingly incorporated into the design of parks from the second half of the 19th century, particularly from the 1880s when football was finally accepted as a 'suitable' sport for parks and the craze for tennis was developing.⁴ Although sports had traditionally been played on available open ground and at pub grounds and had become common in municipal parks and recreation grounds from the 1840s, (many parks authorities initially forbade it, especially football), historians agree that a sport 'revolution' took place from the 1870s and reached its apogee in the 1930s with the cult of the healthy body.⁵

In America before the end of the 19th century, most parks had been designed for rest and the contemplation of nature and horticulture and did not offer much for those

² See Jordan, 'Public Parks'

³ See Cranz, *The Politics of Park Design*, Chapter 2 and Rosenweig, *Eight Hours*, Chapter 5

⁴ Conway, *People's Parks*, 192

⁵ Walpole, *Here Comes the Sun*

seeking more various activities or entertainments.⁶ Here, Frederick Law Olmsted's influence was all-embracing in his promotion of parks for communing with nature and with beauty as the route to health and mental and moral wellbeing.⁷ The modern park needed to accommodate both the needs of those who preferred to stroll through the park and enjoy the peace and horticultural displays, those who came to the park to listen to music or play gentle games like bowls and croquet, those who preferred more physical sports like tennis, football, swimming or basketball and most important, the needs of children and their carers, seeking playgrounds and wading pools. New parks and playgrounds were also increasingly being provided in working-class areas. These initiatives were partly driven by working-class campaigners, seeking more accessible space for sports and for play, and partly by civic leaders and manufacturers who believed that more open space and 'play' had the potential to reform the health and morality of the working classes and their children and to Americanise immigrant communities.⁸

Hazel Conway has argued that in Britain by the 1930s, public health was one of the most significant of the forces in park making, following a series of Acts on public health culminating with the 1925 Public Health Act.⁹ However, William Pettigrew, an expert on park management and design in the 1920s and 1930s, suggested that parks had been achieved as much by public pressure for more recreation as by legislation.¹⁰ It is also possible that the example of industry in donating land, funding municipal

⁶ Knapp, 'Municipal Recreation'

⁷ See 'Public Parks and the Enlargement of Towns' in Sutton, S. B. (ed.) *Frederick Law Olmsted. Civilizing American Cities. Writings on City Landscapes* (New York, 1997), pp. 53-99

⁸ Rosenweig, *Eight Hours*, 148

⁹ Conway, H. 'Everyday Landscapes: Public Parks from 1930 to 2000' *Garden History* 28:1 (2000), 117-134

¹⁰ Pettigrew, W. W. 'Municipal Parks: layout, management and administration, together with a short treatise on the organisation of a public parks department' *The Journal of Park Administration* (London, 1937), p. 3

parks and supplying recreation grounds for their workforce was a contributing factor. Certainly, health experts regarded Bournville as an ideal in conditions for healthy industrial workers.¹¹ However, a combination of forces, from company sports to legislation, pressure from works unions, public demand, civic pride and status and town planning was at work here.¹² In Britain, in the same year as the Public Health Act, the National Playing Fields Association (NPFA) was formed with the slogan 'More Playing Fields for the People' and calling for a standard of five acres per 1000 population including four acres for recreation grounds and playgrounds and one acre for parks and pleasure grounds. The following year, the Institute of Park Administration was formed and in 1937, the Physical Training and Recreation Act made grants available for local authorities to buy and develop land for recreation grounds, parks and swimming pools and the same year saw the launch of the National Fitness Campaign.¹³ Initial tensions between the parks professionals who favoured the scenic and horticultural beauty of parks, and the sports lobby represented by the NPFA, were resolved and the two worked in tandem as will be discussed in the next section.¹⁴

Public health reform was also a driving force behind the new parks and playgrounds that were laid out in cities across America in the first two decades of the 20th century, but as in Britain, civics, planning and public pressure also contributed.¹⁵ The interest of industry was also an important factor. Roy Rosenweig has argued that in

¹¹ Members of the British Medical Association visited Bournville in 1911. See Cadbury film 'July 26th British Medical Association visit to Bournville' (1911), CB. The film shows members arriving at the factory and inspecting physical 'drill' and swimming displays.

¹² Historians have argued recently that in Britain the pressure for sports provision and space came as much from the working classes as from middle-class reformers. See Bailey, *Leisure and Class* and Metcalfe, *Leisure and Recreation*

¹³ Conway, H. 'Everyday landscapes'

¹⁴ See Pettigrew, 'Municipal Parks', 22-3

¹⁵ Rosenweig, *Eight Hours*, 135

Worcester, Massachusetts, with the deaths of the ‘old guard’ of parks commissioners, who had been land owners predominantly interested in horticulture, the younger generation of commissioners who were manufacturers, supported the provision of sports and play space nearer to working-class areas. In 1907, the mayor of Worcester, a prominent industrialist, announced that industry and commerce should contribute to funding recreation space near the homes of workers.¹⁶ Some employers therefore took responsibility for working class access to open space as a civic duty, but motivated by commercial interests.

Richard Knapp and Galen Cranz have argued that by the 1930s, parks in America were no longer made on the principles of reform, but had become a right for everyone and ‘an expected feature of urban life.’ The word ‘recreation’ had become a buzzword of modernity and parks with recreation and play facilities were for the new, modern working man, woman and child.¹⁷ Municipalities now had a duty to provide parks and playgrounds for all classes, which served the interests of the industrialist members of the civic authorities as well as their employees. At the same time, access to recreation was provided by private industrial initiatives as well as by public authorities.

20th century recreation parks

At this time in Britain, park design was by no means the preserve of the landscape architect; on the contrary, most parks were designed by nurserymen and many by park

¹⁶ Ibid., 144-5

¹⁷ Knapp, ‘Municipal Recreation’, 18-19; Cranz, *The Politics of Park Design*, 101-3

superintendents. Although high-profile landscape architects like Thomas Mawson¹⁸ designed many parks, they were not leaders in the field, whereas in America, architects and landscape architects designed the major park systems. The landscape architecture profession did not enjoy the same status in public landscaping as in America where landscape architecture was more closely affiliated to city planning.¹⁹ In an article published in *Town Planning Review*, October 1911, Mawson pointed out that in Britain, most landscape, or garden architects worked on private commissions, leaving public landscaping to the ‘amateurs’, while in America, the reverse was true.²⁰

For landscape and garden architects, the combination of the more active and the passive delights of parks presented new challenges, for how were they to combine the more functional aspects of parks, like sports-grounds, pavilions and refreshment houses, with scenic beauty and horticulture? These questions preoccupied those few who wrote about park design and planting in this period and above all, they insisted on specialised training to preserve standards.

In Britain, useful evidence for the changing focus of parks, from places to redeem the mind and to aid health, to places for physical recreation can be found in articles in *The Gardener's Chronicle* between 1907 and 1920. The issue of 26 November 1910, reported a lecture given to the Horticultural Club by William Pettigrew, the much respected Superintendent of Parks in Cardiff and then Manchester and much later

¹⁸ President of the Town Planning Institute in 1923 and first President of the Institute of Landscape Architects in 1929.

¹⁹ Landscape architecture in the USA was professionalised in 1899 with founding of the American Society of Landscape Architects, with John Charles Olmsted as the first president and landscape architecture entered the university curriculum. The British Institute of Landscape Architects was founded much later, in 1929.

²⁰ Mawson, T. ‘The Position and Prospects of Landscape Architecture in England’ *Town Planning Review* 2:3 (October 1911), 225-229

author of a book on municipal parks (published in 1937, but in manuscript since the 1920s). Pettigrew drew the audience's attention to the now 'many and varied directions in which the public parks of this country are made to serve the interests of those who dwell in densely-populated districts.' He applauded the different needs and tastes to which the parks were now designed, including bowling, tennis, cricket, golf, football, boating, fishing and swimming, but he was pleased to report that the horticultural provision of the parks, by no means hampered by these developments, had been increased alongside the sporting and other leisure facilities. However, Pettigrew emphasised the importance of horticultural expertise and training, 'the art of cultivation is a progressive art', in order to produce the best results possible in quality and variety of display.²¹ Subsequent articles on parks in the *Chronicle* testify to the numbers of new parks being opened across the country and the popularity of games playing in the parks as well as other cultural activities like listening to music.

Two key sources on park design in Britain and America in the early 20th century are Thomas Mawson's *Civic Art. Studies in Town Planning, Parks, Boulevards and Open Spaces*, published in 1911 and George Burnap's *Parks: their Design, Equipment and Use*, published in 1916. Mawson acknowledged the value of physical activities in parks like boating, fishing and tennis, including the essential income returned to local authorities for the use of such amenities, but as a designer, his real interest was in layout, structure and park buildings and furniture. He emphasised the importance of quiet areas, sheltered from the noise of recreation grounds, enough provision for eating and changing and most importantly, excellent provision for park music.²²

²¹ Pettigrew, W. *The Gardener's Chronicle* (26 November 1910), p. 394

²² Mawson, T.H. *Civic Art: Studies in Town Planning, Parks, Boulevards and Open Spaces* (London, 1911), p. 190

In America, Richard Watrous, Secretary to the American Civic Association, was more upbeat and pragmatic about recreation in his introduction to the book written by Washington DC landscape architect George Burnap, giving recreation equal weight to beauty in his view of the value of parks. Burnap, in setting out his principles for park design and perhaps countering the tenets of 'City Beautiful' as expressed by Mulford Robinson, recommends that designers should never allow artistic considerations to outweigh practical ones and that the plan of a park should first and foremost '...meet every demand of convenience' and that the design must grow out of the existing physical conditions.²³ Burnap deplored the tendency of some recreation parks in America to become 'driving parks' serving those wealthy enough to own an automobile or carriage and that the design should include enough walkways to make the park accessible and pleasurable for all. He applauded the possibilities for informal fun as well as educational and cultural opportunities possible in parks, but warned against making them 'into an edition of Coney Island' and, like Mawson, he considered that music was 'indispensable' to enjoyment of parks.²⁴ In all these recommendations, giving a perfect balance between 'passive' and 'active' recreation, he had moved on from the 'father' of American park design, F.L. Olmsted for whom the natural and aesthetic benefits of parks outweighed the popular sporting and leisure ones. Like Olmsted's sons, John Charles and Frederick Law II, Burnap's conception of a park reflected an increasingly modern democratic outlook.

Sources on park design written by designers, then, remained scarce until the 1930s.

In England, discussion of parks tended to take place in the context of planning. Then in 1937, Pettigrew at last published his book *Municipal Parks. Layout, Management*

²³ Burnap, G. *Parks: their Design, Equipment and Use* (London, Philadelphia, Montreal, 1916), p. 62

²⁴ *Ibid.*, p. 120

and Administration that had been germinating for at least 30 years. It is an invaluable summary of the differences in design between the formal and natural, the pleasure park to the recreation park. Pettigrew discussed the effects on park design of the NPA founded in 1925 when garden designers had to contend with increased lobbying for sporting provision. However he argued that the initial tensions between garden designers and the NPA were effectively resolved as they recognised each other's strengths.

Pettigrew's book could almost be a blueprint for the parks designed in the 1920s and 1930s at Bournville and at the NCR in Dayton. As we shall see in the next chapter, the company parks imitated the municipal parks very closely in provision of amenities and in design. These company facilities were at least as sophisticated as most municipal parks, even more so in some respects in the case of the Hills and Dales Park at the NCR, and for parks to be cost effective, it was essential to employ professional park designers to make them. For these design professionals, the company park commission had, by the 1920s, become a distinct category, identified by the landscape architect profession in its drive to define and justify the typologies of their projects. And in the same way that municipal parks were making a difference to working-class life in providing interesting leisure and sporting activities, so the industrialists were providing their workers with equal facilities, at favourable cost and easily accessible to their homes and workplaces.

Industrial recreation and company parks

Alongside the developing practices of leisure and recreation, sporting and other outdoor cultural opportunities were increasingly available in the workplace. First,

employers were filling a need for facilities in areas where municipal or private access was insufficient. Even where local sports grounds were accessible, employers had an interest in keeping employees 'on the premises' for their leisure time, because through their sports clubs, they could promote rational recreation and discourage anti-social behaviour (no alcohol or gambling in the pavilions for example). Company sports also had the advantages of conditioning the workforce with community spirit and values and promoting the name and reputation of the company through local, national and even international competition. At Cadbury, inter-county and international hockey and rugby matches were played at the Grounds, and the Midland Championships of the Amateur Athletics Association took place there. Although the number of sporting facilities outside work was on the increase, access was not always easy or affordable; therefore, towards the end of the 19th century, industrialists could meet the recreational needs and demands of the workforce while adding value to their business at the same time.

Alongside the call for recreation was the advancement of the idea that exercise and the pleasure of the outdoors should become part of everyday life at work, as well as at school or in leisure time. And while it made economic sense to make factories attractive and healthful places, large companies increasingly regarded exercise provision as their duty and responsibility and employees regarded it as their right.

Physical exercise at factories was not an innovation at the end of the 19th century because from the early days of the factory system, some factory owners, even in the most cramped sites, allowed their child workers to play in the yard at lunchtime, or made playgrounds where the children were 'drilled'. Robert Owen at New Lanark

made exercise an essential part of his theory of factory management and organisation designed to transform a miserable workforce into model workers. He made 'drill' compulsory in an enclosed area front of the factory school that was effectively a playground, but he called it euphemistically 'a situation of safety' 'a place of meeting' or more realistically, 'a drill ground' where the boys were trained in the use of arms. [See Fig. 4.8] This was a precedent for organised exercises in factories until well into the 20th century.

Drill had become part of the schools curriculum in the last quarter of the 19th century because school boards believed that this kind of disciplined exercise helped to control behaviour.²⁵ Drill became more common at factories by the end of the 19th century promoted by the exercise and playground movement and it tended to be compulsory for employees under eighteen. In 1906, the boys and girls at Cadbury were exercised using the popular Swedish drill method for two half hours each week in works time and in dry weather, this took place on the recreation grounds. [Fig. 5.1] (Fig. 3.20 shows the girls exercising outside the gymnasium wearing their work smocks.) Adult workers were also offered physical training at factories and other workplaces. A photograph taken c.1900 at the Guild of Handicraft at Chipping Camden shows the workers doing bending and stretching exercises outside the workshop.²⁶ [Fig. 5.2] The Welfare Association of the Spirella Corset Company in Meadville, Pennsylvania regarded such regular training to be an important part of health. An article in their house journal *Threads* in November 1931, claimed that men from every department in the company, including directors and managers from factory and office, participated

²⁵ Bailey, *Leisure and Class*, 139

²⁶ *Crafts Magazine* 208 (Sept/Oct 2007), p.34

in the men's physical training evenings.²⁷ At the NCR factory in the early 1900s, the workers were given ten minutes' 'rest' morning and afternoon during which physical drill or callisthenics was practiced under trained instructors.²⁸ At Bata during the ten-minute morning tea break, employees could choose rest or exercise:

Some, lead by the foremen and forewomen, go for a sharp run round the lawns when mornings are chilly. Leap frog is popular among the boys and skipping among the girls.²⁹

(Skipping in the late 19th century had been forbidden in some parks – in Victoria Park, persistent skippers were likely to be arrested.³⁰)

There is no evidence of organised team sports for adults at factories until the 1850s, although football kickabouts or cricket in the factory yard or games played on a neighbouring field or later, in a local park would have been informally organised in some factories.³¹ Before their move to the new suburban site in 1878, the Cadbury brothers closed the factory for half a day 'from time to time' for football or skating.³² From about the middle of the 19th century, a growing interest in organised sports and their benefits, led to the creation of sports grounds and pavilions and after 1900, a few companies built swimming tanks or baths. There is evidence of provision by an industry for recreation as early as 1854 and there are likely to be other examples of this on both continents.³³ Christian organisations played a major part in promoting recreation for industrial workers in America and in Britain. In 1868, the Young Men's Christian Association appointed Robert Weidensall to arrange recreation activities for

²⁷ 'Sports and Pastimes' *Threads* IV: 45 (November 1931), pp. 151-55, FGCM

²⁸ Meakin, *Model Factories*, 140

²⁹ 'Playtime' *Bata Record* 101 (15 May 1936), p.1, BRRC

³⁰ Conway, *People's Parks*, 192

³¹ Bailey, *Leisure and Class*

³² Cadbury, *Experiments*, 221-2

³³ Neer, D. L. 'Recreation in the Age of Automation' *Annals of the American Academy of Political and Social Science* 313 (September 1957), 79-82

the crews constructing the Union Pacific railroad tracks across the US.³⁴ In Britain, in the 1870s and 1880s, churches or Christian institutions founded 20-25% of football and cricket clubs in Birmingham and equal numbers were started at workplaces.

In Britain, the introduction of half-day working on Saturdays from the 1870s, provided a catalyst to sport, which was promoted partly to encourage respectable healthy recreation, but was also driven by demand. In some regions, from the 1920s until the 1970s, some of the most extensive and sophisticated sports grounds were owned or operated by private companies. By 1880 in Birmingham, there were over twenty works-related clubs, but this involved only a minute percentage of the total plants in Birmingham, few of which saw the purpose or had the space or funds to open them. This changed after about 1900 when companies migrated to the suburbs and bought or leased land for sports, or those located nearer to city centres acquired space a short walk or cycle ride away from the factory. In Britain, recreation grounds started to be a feature of larger factories from the 1890s,³⁵ in parallel with the same kinds of recreation being provided by municipal authorities. In Nottingham, three rapidly expanding firms all opened sports grounds for their employees in the early 20th century. The Boots Company (in 1900, the second largest firm in Nottingham) initially used a local public recreation ground for their athletic club (founded in 1894), until they found land for their own at Lady Bay in 1900.³⁶ In 1905, John Player opened a 33-acre sports ground on Aspley Road not far from their factory at Lenton [Fig. 5.3] and the Raleigh Company opened a new ground of 37 acres at Wollaton for

³⁴ Ibid.

³⁵ See Jones, *Sport*. Jones found that detailed research of the Lancashire cotton industry showed that sports provision was connected to the size, structure and technological base of firms, and the nature of market conditions. Effectively it was larger mills that had outlets for sport.

³⁶ See Beckett, *A Centenary History*; Boots Company 'Lady Bay Sports Ground' (unpublished notes), BC

the Athletic Club that had been founded in 1926.³⁷ By the 1930s, recreational facilities were common at large manufacturing companies. A survey of 88 firms by the British Industrial Welfare Society in 1938 found that 75 of them had their own sports grounds, mostly with pavilions.³⁸

The scale and quality of the industrial recreation grounds and the facilities for teams and entertainment were in some regions superior to municipal or other private grounds. A journalist of the *Star* newspaper remarked in September 1906 after a visit to Cadbury: 'There is a beautiful cricket ground which many county clubs would envy, and large open-air and indoor baths, the like of which many large towns would like to possess.'³⁹ At Cadbury, sporting provision was extensive. By 1936 at the company recreation grounds there were fifteen football pitches (Association and Rugby), ten hockey, five netball, fourteen cricket, 53 tennis courts (grass and hard), five bowling greens, also croquet lawns, two putting courses and a lake for model yachts. There were approximately 51 Association and Rugby football teams, 26 cricket, 37 tennis, 26 bowls, 26 hockey and 23 netball teams. Many others participated in swimming and water polo, cross country running, gymnastics, cycling, golf, angling and physical training. This did not take into account the number of indoor sports and games that were available like gymnastics, badminton and table tennis.⁴⁰ The Boots Company sports ground provided for cricket, tennis, hockey, football, bowling and rifle shooting. In 1923, an eighteen-hole putting course and a

³⁷ John Player *From Plantation to "Players". A Brief History of Tobacco Including Cultivation and Manufacture* (Nottingham, 1936); 'Building fine bicycles' Raleigh Company souvenir guide 1950s. Nottinghamshire Archives, DDRN 7/2/22-36

³⁸ IWS *Recreation in Industry* (1938), p. 6

³⁹ 'Simple and Happy Life. Comfort for Workers in Beautiful Bournville' *The Star* (September 1906) 'Visit of the Press to Bournville, September 24 1906', CB, 024 003225

⁴⁰ Cadbury *The Factory and Recreation* (Bournville, 1925), CB

running track were added followed by further facilities for athletics.⁴¹ At the smaller model factories such as Ovaltine, the company provided football and cricket pitches at the very least, and a handful of tennis courts.

Companies also held their own sports days to which families and friends were invited and all had the opportunity to participate, from the owners and their wives and children, to the newest recruit to the factory floor. At the Bata Factory at East Tilbury built in the early 1930s, where sport was part of factory life from the start, sporting events were promoted as an important part of corporate culture. The first edition of the *Bata Record*, 25 May 1934 reported the Sports Day held on Whit Monday, with 200 participants and featured running, cycling, wheelbarrow, egg and spoon, musical chairs and the three-legged race.⁴² Later in the year in August, two more sports meetings were held with all day amusements that included cricket, tennis, sports and dancing.

Beauchampé and Inglis, in their study of the sporting life of Birmingham, UK from the 1920s until the 1970s, provide valuable information on industrial recreation there. Several of the area's largest sports facilities were owned or run by private companies. In the 1870s and 1880s, about a quarter of Birmingham's football and cricket clubs were based around the workplace. There were over twenty works-related football clubs by 1880 and by the early 20th century, with more companies moving out of the city centre, many more made or leased sports grounds and by 1955 there were 94 works grounds in the Birmingham area. In 1905 the Birmingham and District Works Amateur Football Association was founded 'to assist in the social unity between

⁴¹ Boots Company, 'Lady Bay', BC

⁴² 'Whit Monday Sports' *Bata Record* 1 (May 25, 1934), p.1, BRRC

employers and employed...and to help by recreation to fit men better for their daily task, and make of them more contented workmen'. By 1939 it was the world's largest works football association and 278 teams from 205 clubs were competing in nineteen divisions. 'In a very real sense the Birmingham and District Works AFA was one of the great social achievements of Birmingham's Industrial age' concluded Beauchampé and Inglis. Perhaps the most memorable indication of the footballing prowess of the Birmingham workers is that the team at the George Salter spring factory eventually became West Bromwich Albion.⁴³

In America, company sports were facilitated after the turn of the century when play parks began to be established in some large cities. Anderson has argued that the establishment of ten new parks in Chicago (from 1904) marked a significant moment in the growth of industrial recreation because industrial workers and their families used them extensively.⁴⁴ By 1916, at least 480 towns and cities in the US had developed over three thousand playgrounds and recreation centres and corporations were invited to join special recreation programmes. The San Francisco Industrial Athletic Association was inaugurated in 1918 to arrange inter-company athletic competitions and in Oakland an Industrial Athletic Association was formed in cooperation with the city's recreation department.⁴⁵ Don Neer has argued that in the USA, the development of industrial recreation preceded that of municipal recreation⁴⁶ and the evidence here suggests that this could be true, or at least that industrial recreation provided a catalyst to municipal recreation.

⁴³ Beauchampé and Inglis *Played in Birmingham*, 76-9

⁴⁴ Anderson, *Industrial Recreation*, 48

⁴⁵ Park, R. J. 'Blending business and basketball: industrial sports and recreation in the United States from the late 1800s to 1960' *Stadion* 3:11 (2005), 35-49

⁴⁶ Neer, *Recreation*, 79

As in Britain, industrial recreation accelerated from the 1890s. The Metropolitan Life Insurance Company in New York and the National Cash Register Company already had employee recreation associations from the early 1890s but swift improvements were made soon afterwards by the Young Men's Christian Association who organised a national industrial department and the Playground Association which was founded in 1906. Both organisations promoted company recreation and provided help to companies in formulating recreation programmes. Most sources cite the NCR recreation programme that began with a building for company recreation on its grounds in 1891⁴⁷ and calisthenics in the lunch hour in 1894, as the most impressive of all industrial recreation programmes in America.⁴⁸

Golf took off as a sport for industrial workers on both continents, but was more common in America where space was at less of a premium. In 1895, Oneida Ltd of New York had a nine-hole golf course and by 1957, over 100 companies in the US owned their own golf courses. Clubs for balloonists and rifle shooting were also known.⁴⁹ Bowling alleys were popular in America but outdoor bowls more common in Britain. The Shredded Wheat Factory at Niagara Falls had a skating rink and at Welwyn, Shredded Wheat employees enjoyed playing 'Horseshoe', a game introduced from Canada where a heavy carthorse shoe was hurled at a spike in the ground.⁵⁰

⁴⁷ This was not the first company recreation building in the USA. The Joliet Steel Company built one in 1889 and the Ludlow Athletic and Recreation Association in 1896. See Anderson, *Industrial Recreation*, 43-4

⁴⁸ For example Frankel, L. K. and Fleisher, A. *The Human Factor in Industry* (New York, 1920) in Anderson, *Industrial Recreation*, 44-5 and Park, 'Blending Business', 36

⁴⁹ Brandes, *American Welfare Capitalism*, 5

⁵⁰ *The Welwyn Times* (24 April 1970), HL

In 1913, the US Bureau of Labor Statistics studied recreation provision in 51 companies and revealed that 56% of them sponsored recreation activities. In another study of welfare work in industry conducted by the Bureau a few years later for the period 1916-17, of the 431 companies that responded, just over half of them reported outdoor recreation facilities, including 152 that had baseball grounds, 89 had tennis courts and 28 had athletic fields.⁵¹ With an increasing commitment to welfare capitalism in the 1920s, company recreation reached a high point, only slightly reduced after 1929. Between 1929 and 1935 despite depression, industrial recreation activities, although greatly curtailed, survived and rebounded when the economy recovered.

On both continents, the employees themselves, through their own athletic associations, ran the majority of company recreation schemes on a voluntary membership basis. In most cases, management matched employee contributions to the recreation fund and generally paid for new facilities.⁵² Where space or funds were not available to firms, it was common for them to use the local municipal or school recreation facilities. Industrial recreation was widely discussed in professional and academic journals and industrial recreation associations promoted good practice and provided specialist support for members. In 1938, Purdue University in the US established a course for the training of industrial recreation personnel, thus fully professionalising the job and in 1941, the national headquarters of the Recreation Association for American Industry was established in Chicago.

⁵¹ *Welfare Work for Employees in Industrial Establishments in the United States* U.S. Bureau of Labor Statistics Bulletin 250, 1919 in Anderson, *Industrial Recreation*, 55

⁵² Neer, *Recreation*, 79-82

Sport and play for women and girls at the factory

In companies with a high commitment to welfare that employed a large proportion of women, there was a deliberate attempt to give equal weight to women's facilities as to men's and it could be argued that industrialists contributed to an extent to the emancipation of women through sport.

While historians have shown that the political institutions of women's liberation did not adopt sport (with the possible exception of bicycling) as part of their campaigning strategy and might have missed a useful opportunity in not doing so,⁵³ the availability of sport for women and their enthusiasm for it was representative of increasing emancipation. Sport not only gave women bodily freedoms and could have been a factor in encouraging the adoption of less restrictive clothing, but it also gave women new opportunities to participate in outdoor activities in the public realm. While there were considerable sporting opportunities for men organised by working men's clubs and at pubs by the late 19th century, women had did not have access to these recreational groups. Even further and higher education establishments provided few sporting opportunities for women. This changed after the First World War when women's sport also underwent a revolution,⁵⁴ although old-fashioned prejudices held by men and some, usually older, women, continued to inhibit some women's participation in physical activities.⁵⁵ Therefore opportunities at the relatively protected environment of a respectable factory would have made sport more

⁵³ Park, J. 'Sport, dress reform and the emancipation of women in Victorian England: A Reappraisal' *The International Journal of the History of Sport* 6:1 (1989), 10-30

⁵⁴ Jones, *Sport*, 63. Jones cites the following examples of institutional sport for working-class women: the Women's Amateur Athletics Association was founded in 1922 and in the North East a women's keep fit class which began in 1929 with one class and 127 women, grew to nine weekly classes with 500 people by the end of the year. Membership of the middle-class Women's League of Health and Beauty, started in late 1920s, rose from 30,000 in 1933 to 120,000 in 1937 and 166,000 by 1939; a growth which he suggests, must have included working-class women.

⁵⁵ See Hagen, M.A. 'Industrial Harmony through Sports: the Industrial Recreation Movement and Women's Sports' (PhD, The University of Wisconsin, Madison, 1990)

acceptable, particularly to the parents of factory girls who wanted to uphold their daughter's respectability. Companies were offering sport for women at factories as early as the 1890s were therefore in the forefront of the women's sports movement and even in the 1920s were providing opportunities for women that might otherwise have been limited. **[Fig. 5.4]** Some like Cadbury and Rowntree encouraged women's cricket,⁵⁶ which was regarded with much prejudice and often hilarity in many circles, male and female. **[Fig. 5.5]** S. Philips has pointed out in his study of welfare at the Boots Company in Nottingham, that space there for women's sports was small compared to men's,⁵⁷ although this could have been due to smaller numbers of women participating, than to a lack of provision for women by the company. By the 1940s there was a wider choice of sports for women; for example it was common for firms in America to include women in male dominated sports like shooting and fishing.⁵⁸

Conclusion

The above discussion has shown that a significant industrial sport movement contributed to the sporting 'revolution' of the late 19th and early 20th centuries. The role of industry in promoting sport was extremely significant, more so perhaps than sports historians like S.G. Jones have indicated.⁵⁹ By 1910 there was a brisk expansion of the number of companies providing recreation activities for their employees at increasing levels of sophistication.⁶⁰ In Britain the increase of sports facilities at factories parallels the same in municipal parks and the works grounds

⁵⁶ See Park, 'Sport' for the history of women's cricket in the early 20th century.

⁵⁷ Philips, S. 'Industrial Welfare and Recreation at Boots Pure Drug Company 1883-1945' (PhD Nottingham Trent University, April 2003).

⁵⁸ Park, 'Blending Business', 41-2

⁵⁹ Jones, *Sport*, 62

⁶⁰ Tolman, *Social Engineering* and Anderson, *Industrial Recreation*, 52

were equal or even superior to public ones. Factory sports grounds provided an important additional facility for working men who would otherwise have had to seek sporting opportunities as a member of a working class organisation, a religious body or in the municipal park. For women, who had less choice, the factory sports ground is likely to have made a more significant difference to their choices of leisure activities and to their quality of life.

The evidence suggests that most companies with sports facilities provided functional playing fields rather than parks or recreation grounds that included more elaborate landscaping for a wider variety of recreational purposes. However, a significant number of companies did include gardens and parks as part of their recreational facilities (at least 293 in America in 1936, although this figure includes allotment gardens which are likely to have been more common than pleasure gardens).

Company gardens and recreation parks presented lucrative opportunities for landscape architects to practise their expertise, although industrial and commercial projects were still relatively few compared to commissions for private gardens or large public projects like parks and planning. Considering the growing numbers of factory landscapes in the USA and UK between the Wars, it is surprising that relatively little was written by landscape architects about the design of company parks and gardens until the 1930s. In the UK, the newly formed Institute of Landscape Architecture (ILA) began to publish articles about industrial landscaping in their Journal, *Landscape and Garden* from 1934, which suggests that these kinds of commissions were considered to be relatively valuable to the British landscape architect's portfolio. In *Landscape Architecture*, the journal of the American Society of Landscape

Architects (ASLA), articles on commercial landscaping appeared only from 1938, which suggests that for nearly thirty years after the journal was first published (1910), commercial landscape commissions were of lesser value to American landscape architects than planning or private garden commissions.⁶¹ The contribution to industrial landscaping by the landscape architecture profession will be discussed further in the next chapter.

⁶¹ The early volumes of *Landscape Architecture* the journal of ASLA, first published in 1910, cover mainly planning, private gardens and roadside and railway planting. The article in 1938 concerns the landscaping of the Massachusetts Mutual Life Insurance Co., designed by the Olmsted Brothers XXVIII: 2 (January 1938) 110-111

Chapter 6: The Landscape Architect and the Design of Company Parks

The discussion will now turn to an analysis of Rowheath Park, designed by Cheals Nurseries from 1921 and opened for the Cadbury workforce and the Hills and Dales Park, the Old Barn Club and Old River Park, made at the NCR between 1906 and 1939, designed by the Olmsteds. These parks stand out as being of great significance in terms of their scale and the sophistication of their designs in a factory context. This section will analyse the differences in Britain and America between involvements in corporate landscaping amongst the landscape architecture profession. The discussion will analyse the differences in company park theory and design, both in what it was possible to achieve in the suburban landscapes of the two nations and in the beliefs, desires and expectations of the factory worker and his patriarch in what the landscape could provide for them. The analysis will also show the ways in which the parks represent some of the differences in the cultural, symbolic and stylistic approaches to landscape design in the two nations.

Stephen Daniels' *Fields of Vision: Landscape Imagery and National Identity in England and the United States* explores how landscapes in different media have suggested national identities. Daniels argues that the American West and the English landed estate are two of the predominant models for the symbolic landscapes of the two nations.⁶² This analysis agrees that these models are each present in the American and English company parks and suggests that in addition, they were modelled on landscapes of national identity that were developing from particular conditions of suburbanisation in Britain and America at the time. Borrowing ideas from Leo Marx in *The Machine in the Garden: Technology and the Pastoral Ideal in America* the

⁶² (Cambridge, 1993), p. 3

discussion will consider the conflicting relationships between industry and nature, technology and the garden in the context of the suburban factory park and garden to suggest how they should be understood in the context of industrialisation before the Second World War.⁶³

This choice of case studies does not claim that these parks were the best of their kind because it has not been possible to research all the possible examples (the park at the Hershey Chocolate factory town in Pennsylvania was clearly another fine corporate landscape). However, these two companies are singled out more often than others as those that achieved high standards of landscaping for their workforces. Another reason for choosing these parks is the availability of extensive evidence of their designs, including the original plans and the high profile of their designers, especially the Olmsted firm that worked for the NCR. It will be suggested that the park-making activities of the Cadbury Brothers and of John Patterson and his heirs, as leading industrialists of their day, give a sound indication of good practice in park design for industrial welfare in this period.

The landscape architecture profession and corporate landscaping

By the turn of the 19th century, the newly emerging profession of landscape architect was already active in a small number of corporate landscape commissions. After 1900, the Olmsted Brothers in the US and the Cheals Company in the UK were amongst the first of the landscape firms to acknowledge and seize the growing number of lucrative commissions for corporate landscaping in an industrial world that was recognising the value of recreation to worker health, satisfaction, retention and

⁶³ Marx, *The Machine in the Garden*

therefore productivity. These companies had already been active in the design of parks: the Olmsteds had been famous for several decades as innovators in park design in the USA after Frederick Law's (and his partner Calvert Vaux's) plans for Central Park in New York (1857-61) and for the designs of municipal parks for working-class neighbourhoods including the Chicago Park system which included extensive facilities for sports and other forms of recreation. (The Olmsted firm became the nation's leading landscape architects and town planners.⁶⁴) The Cheals firm designed a number of municipal parks in the UK in the early 1900s, which met the demand for sports and leisure facilities in parks.⁶⁵ Therefore a corporate park commission presented no difficulty in terms of understanding the requirements for recreation. Between 1900 and 1939, the Olmsted Brothers were involved in at least twenty commissions for factory landscaping including recreation grounds and these were in addition to the numerous designs they did for railway companies, insurance, banks, water companies and corporate headquarters.⁶⁶ Corporate commissions for the Cheals Nursery in the same decades were relatively few. They included the parks and gardens at Bournville (from 1906), Fry (from 1915), the Glaxo Laboratories (from 1936) and after the Second World War, the Paynes Chocolate Factory near Croydon.⁶⁷

The landscape architect and town planner Thomas Mawson worked for the industrialist, Lord Leverhulme, providing a plan for Port Sunlight industrial village and designs for his private garden at Thornton Manor nearby. The industrialist required space to entertain up to 2,000 members of his workforce in his gardens at a

⁶⁴ Bender, *Towards an Urban Vision*, 175

⁶⁵ Cheals designed at least fifteen parks between 1885 and 1920, including in Ramsgate, Broadstairs, Margate, Hove, Poole, Leeds, Wrexham, and Acton and Stratford parks in London. See Benton, A.M. *Cheals of Crawley: the Family Firm at Lowfield Nurseries 1860s-1960s* (Uckfield, 2002)

⁶⁶ Beveridge, C. E. *Master List of Design Projects of the Olmsted Firm 1857-1950* (New York, 1987), pp. 265-273

⁶⁷ Benton, *Cheals*, 207-8, 287

time and so Mawson made the garden paths extra wide, designed a lawn to accommodate a large marquee and incorporated numerous shelters into his designs.⁶⁸ He also made a plan for a water park at the Manor that is illustrated in his book *Civic Art*, to provide swimming and boating facilities for his workforce.⁶⁹ In *Civic Art* published in 1911, Mawson acknowledged the value of good architecture and landscape architecture in promoting respectability, by recommending that for ‘certain’ trades such as furniture, clothing and foodstuffs, employing a ‘certain’ class of employee, the factory and its suburb should be ‘a thing of beauty and a direct asset to their immediate neighbourhood.’⁷⁰ Mawson did not design any other factory landscapes, but his espousal of gardens for ‘respectable’ factory workers, reflects progressive, if discriminatory thought on the role and value of gardens and parks to factory workers and the remark is, as far as I can tell, the first instance in Britain of a designer, rather than a social theorist, recommending factory landscaping.⁷¹

By the time Mawson’s book was published, the Olmsted Brothers in the USA, a larger firm, had been or were involved in at least six industrial landscape projects and these were to increase through the 1920s and 1930s.⁷² Therefore the assertion that: ‘The corporate landscape evolved after World War II because of rapid growth of industry and the advent of suburbia’⁷³ is misleading since such landscapes evolved *between* the Wars.⁷⁴ The corporate landscape not only evolved in this period, but was also defined as a new type of modern recreation facility through expansion and modernisation that

⁶⁸ Waymark, J. *Thomas Mawson: Life, Gardens and Landscapes* (London, 2009), p. 75

⁶⁹ Mawson, *Civic Art*, 196

⁷⁰ *Ibid.*, 219-20

⁷¹ Charles Mulford Robinson, the American planning theorist and Professor of Civic Design at the University of Illinois at Urbana-Champaign mentions the value of beautifying suburban factories in his book *Modern Civic Art*, first published in 1904 (London, 1998)

⁷² Beveridge, *Master List*

⁷³ Barton, C. ‘Institutional and Corporate Landscapes’ in Tishler, *American Landscape Architecture*, 151

⁷⁴ Mozingo, *Campus, Estate and Park*, 255

served the needs of all workers, male and female. It was no coincidence that in the same year that *Civic Art* was published, the landscape architect firm of Morell and Nichols of Minneapolis published a book to promote the value of landscape architecture (and their business) and it includes a section on factory grounds. What it says is so significant in relation to this study that it is quoted in full:

Probably no field of the practice has been up to the present time so neglected as that of factory grounds and yet there is no greater advertising medium and nothing to which a workingman (sic) will go with greater pride than to the factory whose grounds are made attractive with trees, shrubs, flowers, and has been very markedly demonstrated that the influence of such development extends beyond the factory grounds and extends to the workingman's (sic) home where he desires to make his little grounds attractive and bright. It is through this influence that the development of factory grounds is everywhere receiving more and more attention.⁷⁵

It is significant that landscape architects were earlier to professionalise in the US than in the UK. Morell and Nichols suggest in their pamphlet that America was leading the way in landscape architecture and the evidence suggests that in terms of the breadth of their work, in the commercial as well as in civic, housing and the private sectors (offices, schools and factories for example) that this was a valid assertion.

Factory parks – ‘the machine in the garden’

Landscape architects like Thomas Mawson, the Olmsteds and Morrell and Nicols were professionals skilled in communicating the value of their art to industrialist clients – the importance of aesthetics in an industrial landscape and the benefits of expert design in making the best of a site for advertising and for worker morale.⁷⁶

Their knowledge of plants also gave them a particular expertise in those best suited to

⁷⁵ Morell and Nicols, (1911)

⁷⁶ Thomas Mawson had a long professional and personal relationship with William Lever. The letters from the Olmsted firm to their clients in the Library of Congress, Washington DC, a number of which are cited in this thesis, are testimony to their professional approach.

industrial conditions. Their business was to unify the oppositions of industry and the landscape, the machine and the garden.

In English Romanticism, (the writings of Wordsworth, Carlyle and Ruskin for example) the machine and nature had been in opposition since the first large factories began to ‘blight’ the landscape, although in some British landscape art, the relationship between industrial production and the landscape is more ambiguous.⁷⁷

Leo Marx has argued that in American Romanticism the contrast between the machine and nature was ‘the great issue’ of American culture. Although some writers like Emerson initially defended the machine in the landscape as a technological sublime, by the end of the 19th century, the machine represented the forces working against pastoralism – an onslaught on an American ideal.⁷⁸ Landscaping for industry was an attempt to resolve the machine/nature conflict. Federico Bucci has suggested that industrialists achieved a union of the machine and the garden in building company towns, particularly when workers’ housing was designed to imitate a village – factory and village unified in one architectural space to bring together the functional and the pastoral.⁷⁹ The landscaping of factory buildings and creation of factory parks was however a more tangible and convincing resolution of the machine/garden opposition. Company towns and villages tended to be spaces of surveillance, as Bucci has argued, where workers’ domestic and social lives were scrutinized as part of the corporate machinery or systems. By contrast, the company parks that were developed from the 1910s to the 1930s, were designed and managed to offer increasing opportunities and freedoms for the workforce without overt supervision.

⁷⁷ Some landscape painters, J.M.W. Turner for example, expressed the technological sublime, eg. ‘Rain Steam and Speed’ (1844)

⁷⁸ Marx, *The Machine in the Garden*, 263

⁷⁹ Bucci, ‘Territories of Surveillance’ 65

Rowheath Park, Bournville

By 1920, the Cadbury workforce had grown to approximately 7,500⁸⁰ and so the firm began to plan for a new park of about 40 acres about a quarter of a mile from the factory on the Rowheath Farm estate that they had bought in 1913.⁸¹ The land was jointly purchased with the Bournville Village Trust, but the park was planned for the use of the factory employees. In line with their relatively democratic approach to the workforce, all those with an interest in the park were brought together in a conference to discuss the best way forward.⁸² In the spring of 1922 the experienced park designers, Cheals of Crawley were again employed to produce plans. Cheals, a Quaker firm, had re-modelled the Girls' Grounds fifteen years previously and had worked on a number of private commissions for the family.⁸³ **[Fig. 6.1]**

The first plan for the park suggests that initially, the sporting needs of employees were a priority, for the whole area was to be turned over to playing fields with the exception of a large area for allotments.⁸⁴ **[Fig. 6.2]** Whether the Cheals influenced the design process or whether there was pressure from those in the firm with interests outside sports we do not know, but the revised plan dated 27 May 1924 that was subsequently adopted, makes a much more imaginative use of the space with sports grounds on the larger part of the land and a pleasure park across the road, to cater for

⁸⁰ Numbers peaked at 10,000 in 1938.

⁸¹ 'Rowheath Farm Estate' *BWM* XI: 12 (December 1913), p. 383, CB

⁸² 'Works Council Notes' *BWM* XV111: 1 (January 1920), p. 3 and 'Works Council Notes' *BWM* XVIII: 3 (March 1920), p. 72, CB

⁸³ 'Garden Club at Rowheath' *BWM* XX: 3 (March 1922), p. 66, CB

⁸⁴ 'Rowheath Farm Estate, Bournville Recreation Ground. Layout as Proposed by J. Cheal & Sons Ltd' dated 20 January 1921, CB, Cheal drawing no.11725

more leisurely and horticultural tastes.⁸⁵ [Fig.6.3] No doubt there were economic reasons for engaging more than 100 factory employees to landscape the park, but the symbolism of worker involvement in the project cannot have gone unnoticed.

The design resembled in many ways public parks that were made in Britain between the Wars, with a clear division between areas for sport, play and relaxation, but there were no formal gardens (as at Mawson's Stanley Park in Blackpool 1926⁸⁶). [Fig.6.4] The playing fields were mostly confined to the northern half of the grounds (where a children's playground was planned, but it was never implemented⁸⁷) and the more pastoral area to the south resembled a country club. Known as the Garden Club, this area was defined by a large pavilion on one side overlooking an ornamental lake. To satisfy the dancing craze discussed in Chapter 4, a dancing lawn was made in front of the pavilion, embraced by bandstands on each side from where lines of trees that narrowed into an avenue lead the eye towards the water. The bandstands or outdoor stages were used for concerts, dances and theatre. Beside the Garden Club lawn was an area for more gentle amusements - a putting course, clock golf and croquet. Photographs and drawings of the park suggest that no expense was spared in planting the park and so it must have equalled or bettered any municipal park in attention to detail.⁸⁸

The design of the park was based on an eclectic mix of English landscape traditions. It echoed the English landscape garden style of sweeping swathes of grass and trees

⁸⁵ 'Garden Club Rowheath Estate' Cadbury Brothers Engineers Office, 27 May 1924, CB. The original Cheal plan, if there was one, appears to be lost.

⁸⁶ Conway, 'Everyday Landscapes', 120

⁸⁷ Interview with Alan Shrimpton, Bournville Village Trust Archivist, 26 November 2009

⁸⁸ The Works Council Notes recorded that up to November 1921, approximately 6000 bulbs, 2000 shrubs and 250 forest trees were planted at Rowheath and 2000 fruit trees on the 287 allotments. *BWM* XX1: 3 (March 1923), p. 92, CB

that lead the eye towards focal points including a serpentine lake. However, unlike the typical landscape garden of a landed estate where villages that ‘spoil’ the view were moved, (Nuneham Courtney in Oxfordshire for example) the view from the pavilion looked towards a ‘magnificent panorama’ of nearby Frankley Village, which evoked the English village landscape. The pavilion was given an encircling terrace for this purpose. Walter Creese has pointed out, quoting from an article in *The Studio* magazine of 1901, that this English vernacular landscape is characterised in popular memory and imagination by ‘the undulating nature of the land...coppices and bosky dells [with] a pretty winding stream’, which is the landscape type that shaped the design of Bournville Village and Letchworth Garden City.⁸⁹ However, the creation of vistas using axial lines, including the view of the lake through an avenue of trees is suggestive of the more classical tradition of garden design of the type adopted by Louis de Soissons at Welwyn Garden City, while the footpaths gathered around the lake, the footbridge and the undulating ground planted with trees, shrubs and flowers is reminiscent of the Repton picturesque. A photograph published in 1936 suggests a reference to one further favourite British gardening style, the Arts and Crafts garden, for an effulgent ‘Jekyllesque’ herbaceous border can be seen between the pavilion and bandstands, framing the garden club lawn. **[Fig. 6.5]** Cheals designed the park to suggest a variety of English landscapes, but miniaturised, removed to the suburbs and organised for function and for aesthetic appeal for a modern suburban society.

The layout and amenities of the park reflected modern recreation theory and practice. Unlike the earlier Cadbury recreation grounds adjacent to the factory, there was no gender segregation of space, a reflection of the more relaxed attitudes to relations

⁸⁹ Whitehouse, J.H. ‘Bournville: a Study in Housing Reform’ *The Studio* (1901), 170-171 in Creese, *The Search for Environment*

between the sexes in the post-War period. The design of the park was not, like the Girls' Grounds, suggestive of a private landed estate, despite a 'nod' to that image. Rowheath was a functional, modern public recreational facility that was also aesthetically pleasing and which emphasised the value of fitness, play, entertainment and rest. The park was large enough to accommodate company events that involved thousands of participants and spectators. In June 1931 the centenary celebrations were held on the Rowheath Grounds – about 15,000 assembled for the many entertainments, said to swell to 40,000 for the firework display. The well-designed and functional pavilion and later, the remarkable lido that was added to the site (1937) contributed to the opportunities that were offered by the park. (The lido was replaced by a new one in 1977,⁹⁰ which was demolished in 1987 to make way for housing.)

By the 1920s, the Cadbury workforce and their families (and local residents who had access to Bournville and other local parks) had considerably better access to high-quality recreation grounds than many urban or suburban dwellers in the UK and they were clearly very popular. Beauchampé and Inglis have pointed out that there were small towns in Britain with less.⁹¹ By the time the new grounds opened in 1924, half of the entire Cadbury workforce was a member of company athletic clubs. The grounds accommodated 38 teams for rugby, 38 football, 35 tennis, 32 cricket, 28 bowls, 28 hockey and 25 netball, with additional clubs for cross country, swimming and water polo and a typical Saturday saw up to 100 teams and 1000 players on the grounds. The original grounds closer to the factory continued to be extensively and regularly used, particularly during the lunch hour. Originally the Rowheath Grounds were confined for the use of the workforce and families, but gradually access opened

⁹⁰ *Bournville Reporter* (August/September 1977), CB

⁹¹ Beauchampé and Inglis *Played in Birmingham*, 33

to a broader audience. In 1923, married employees were allowed to bring a friend ‘who had come from a distance’ to see the grounds and it appears that gradually local residents were allowed in, for on weekends in the summer, they joined members of the workforce for band concerts.⁹²

The Cadburys’ genius as developers was that, despite their ambitious commercial and housing developments on farmland outside Birmingham, they will always be remembered as caretakers of the countryside and suburban space. Rowheath was only one of the many suburban and country parks donated by the Cadbury Brothers in that area of Worcestershire and beyond and they made major contributions to Birmingham’s green belt.⁹³ Their approach to development paralleled in many respects that of John Patterson of the NCR in Dayton who, having established his factory on the edge of the city, began to purchase large tracts of land. Some of these he developed for housing, but other substantial areas were made into parks.

The NCR Company parks: Hills and Dales, the Old Barn Club and Old River Park

Like the Cadburys, John Patterson, his son John II and future chief executives of the NCR made recreation facilities for their employees that paralleled in many respects the kinds of recreation parks that were being developed in towns and cities across the nation. But there is good evidence to suggest that from the first decade of the 20th century, all NCR employees enjoyed the types of outdoor space and amenities that were inaccessible or at least uncommon for most working-class people at the time. Like Rowheath, the NCR parks were suggestive of national identities in landscape

⁹² Ibid., 38

⁹³ See for example Marks, W. *Sixty Years of Planning: the Bournville Experiment* (Bournville c.1930), CB; Marks, *George Cadbury*, 34-35

design and this section will draw out their specifically North American features.

While Rowheath was based on an eclectic mix of English landscape traditions, the NCR parks were designed as a combination of the wilderness, the frontier and the pastoral ideals of American landscape, translated and interpreted in a suburban context.

Due to research restrictions⁹⁴, it has not been possible to view the original plans for the Hills and Dales area or the Old Barn Club, and therefore the following discussion is indebted to an unpublished report on the park, compiled for the City of Dayton in 1991 as part of the 1991-2 Hills and Dales Park Preservation Master Plan.⁹⁵

Following Patterson's initial landscaping of the factory from the 1890s that included the Boys' Gardens, the sports grounds and the women's recreation areas, he began to develop the hilly land to the south of the factory (513 acres), mostly as a country park, but he also developed some of the land for housing. (At one time, Patterson proposed a development of workers' cottages, but this never materialised.) **[Figs. 6.6, 6.7]** Patterson also bought a farm (truck garden) from where fresh fruit and vegetables could be supplied to the NCR workforce. The Hills and Dales country park was opened in May 1907 for the officers of the company, but only a month later, Patterson opened it to all residents of Dayton. It is believed that Patterson always had in mind to give some portion of the park to the city of Dayton which, in his view was not making enough allowance for green space. (According to the 1911 Olmsted plan for Dayton, the city only had nineteen acres of parkland, 0.27% of the city's area for a population of 100,000.)

⁹⁴ Due to the current refurbishment of the Olmsted Historic Site, the archives were only partly accessible and visits were restricted to one day.

⁹⁵ Cairns, M. *et al Hills and Dales a Site History* (Dayton, September 1991), NCR.DH

Over the following two decades additions to the park reflected the increasing demands for recreation discussed in the previous chapter. The Olmsteds designed roads and trails across the park to improve access, a golf course, a polo ground, playing fields and rustic camps with log cabin shelters and a small lake. The area began to resemble the Olmsted parks elsewhere in the US, like Prospect Park in Brooklyn. Views were ‘improved’ with the addition of a pergola on the hill to the west and north of the golf clubhouse and to top it all, a shelter was added at Inspiration Point, (a look-out camp with tall stone chimney). The log cabins were an innovative idea and were designed to imitate the experience of camping in the Adirondacks, a favourite holiday region for the wealthy, including the Patterson family. Patterson also loved cabins as they reminded him of his rural roots. As Simon Schama has suggested in his discussion of Thomas Cole’s painting of 1847 ‘Home in the Woods’, the ‘rustic wooden virtue’ of the log cabin in American tradition represented the pioneer’s occupation and taming of the wilderness, an ambivalent image of the ‘savage’ and the ‘social’ that Henry David Thoreau embedded into American culture with his cabin at Walden Pond.⁹⁶

Patterson’s original plan was to provide exclusive recreational space for officers of the company. In 1911, he opened the Old Barn Club for NCR officers, department heads, supervisors and foremen on land adjacent to the Hills and Dales Park.

Patterson invited the Olmsted Brothers to make improvements to attract more members (already 700), including more tennis courts, a bowling green and running track and a children’s playground.⁹⁷ In 1915, either due to altruism or the need to attract more members, the club was opened to all employees for free membership.

⁹⁶ Schama, S. *Landscape and Memory* (London, 1995), p. 203

⁹⁷ Olmsted Brothers report of meeting with John Patterson, 27 May 1912, LC.MD.OAR, Series E, Reel 257

Dancing, dining rooms, tennis, croquet, meetings, parties, picnics, musicals, Sunday afternoon concerts in an outdoor amphitheatre, a dormitory for women, moving pictures, open-air camps, swings, rustic chairs and ‘beautiful shade trees’ were at the disposal of the workforce. The streetcar fare to get there was 10c, approximately \$1.50 today. From 1918, the general public paid a small membership fee for special facilities like golf and tennis at Hills and Dales Club, but it remained free to NCR employees. **[Fig. 6.8]**

Some of the amenities available to the NCR employees were therefore very similar to those enjoyed by the Cadbury workforce, including an amphitheatre (in the Girls’ Grounds at Cadbury), extensive sporting facilities, space for dancing, music, theatre and company events, but the Cadbury workers’ park was smaller, more domestic, and muted than those at the NCR.⁹⁸ The NCR employees had all these facilities but with the additional benefit of a substantial country park almost on their doorstep, with considerably more space and access to forest walks and rides, picnic areas and if they borrowed a log cabin, they could enjoy a simulated camping in the wilderness experience. **[Fig.6.9]** The report from which most of the above information on the park is taken, claims that the Hills and Dales Park was unique for its time because access to a country club and park in easy reach of an industrial suburb was virtually unheard of. It has not been possible to verify this claim but it is known that the United States Shoe Machinery Co. in Beverly, Massachusetts provided a large country club for employees in 1910. Membership was \$2 per year.⁹⁹ However,

⁹⁸ The Cadbury workers did have access though to the ‘great outdoors’ as there were country parks on the edge of Birmingham and if they wished to have an inexpensive holiday, they could stay at one of the company holiday homes or camps.

⁹⁹ Frankel and Fleisher in Anderson, *Industrial Recreation*, 52 -3. Roberta Park in her article on industrial recreation (‘Blending business’) gives the subscription fee for the Athletic Association at

unique or not, it was undoubtedly highly unusual for blue-collar workers to have free and easy access to rural but organised recreational facilities on this scale and to this sophistication of design and amenity, that normally involved a high membership fee and admission charges.

It is suggested therefore that the Hills and Dales Park and the Old Barn Club with access to forest trails and log cabins offered to factory workers a version of the wilderness experience so beloved of Americans at that time. Roderick Nash has argued in *Wilderness and the American Mind* that a 'wilderness cult' gripped all classes of Americans in the early 1900s.¹⁰⁰ Partly caused by rapid urbanisation and the realisation that the frontier way of life was disappearing, Americans sought to reassert their differences and superiority to Europeans, their strength and individualism by keeping the idea of the wilderness alive, preserving wild places and recreating a primitive way of life. This spurred the 'outdoor movement' of hiking and camping in the wilderness assisted by the National Parks Service (founded 1916) that was organising the American landscape for leisure.

However, blue-collar workers in the early 20th century generally did not have the funds or mobility to easily reach the wilderness, or have access to a country park or even a municipal park, which was often situated on the wealthier side of town.

Patterson at the NCR, having the American wilderness on the threshold of the factory, provided a model for a country park that was open to all, whatever their income and mobility. The Olmsteds were ideal collaborators in this ideal for their father, together with Charles Eliot had long before recommended the preservation of wild areas close

United Shoe as \$1. In 1913, the United Shoe Company published a manifesto for their recreation policy. *Good Sport, Good Health, Good Work*.

¹⁰⁰ Nash, R. *Wilderness and the American Mind* (New Haven and London, 1982), Chapter 9

to urban areas.¹⁰¹ The Olmsted brothers campaigned for and designed numerous recreation parks, but where they bordered the countryside, John Charles recommended that the ‘primary aim should be to secure and preserve for the use of the people as much as possible of these advantages of water and mountain views and of woodlands, well distributed and conveniently located.’¹⁰² This caused tensions with Patterson, for on several occasions, the Olmsteds had to tame his development ambitions, not always successfully. For example, when Patterson returned from an extended stay in Europe in 1911, he continued to buy land and develop residential areas, despite the Olmsted Brothers’ warnings that too much development, including some of the recreation facilities, would spoil the character of the woods in the park.

Olmsted interfered only very subtly with the natural beauty and distinctive topography and vegetation of the landscape that became Hills and Dales and the Old Barn Club, mainly making roads and paths for access and planting shrubs and trees (more than fifteen ‘carloads’ [*sic*] of shrubs between 1905 and 1907, according to the *Dayton Herald* of 13th July 1907). In their park designs, the Olmsteds, while drawing in some respects on English landscape traditions in their planting, created an ‘American picturesque’, by adapting the existing distinctive topography and vegetation with as little interference as possible and planting native species.¹⁰³ The Olmsted style was to keep existing vegetation cut back and to plant a mixture of ‘understory’ trees and plants to increase variety and colour in the woods. Plantings included belts of evergreens on the western side of the park, an evergreen windbreak for the truck garden, a mixture of white pine, oak and birch, with hemlock and balsam

¹⁰¹ Ibid., p. 155

¹⁰² Olmsted, J.C. ‘A Comprehensive System of Parks and Parkways. Seattle’ (1903) Olmsted Brothers. (History Link. Online Encyclopedia of Washington State History, www.historylink.org, accessed 24 May 2010)

¹⁰³ Tishler, *American Landscape Architecture*, 41

fir under-planting. To make the natural landscape accessible and safe, they tamed and sanitised the landscape with roads, trails, shelters and policing. [Fig. 6.10]

The design and management of the NCR country parks, while alluding to an American wilderness identity, diluted a sense of the wild by securing and sanitising the landscape with roads, paths and buildings. At Hills and Dales structures like the pergola and look-out shelter dictated modes of behaviour and taste to the consumer of the park. Despite the differences in topography and vegetation, perhaps the English park was not so unlike the American one after all, for they were both commoditised versions of their symbolic landscapes and designed for aspirant urban and suburban citizens, much like suburban housing.

By the mid 1930s, for reasons that are not clear, but perhaps because the company and some of the workforce wished to have their recreation space closer to the factory, yet another recreation facility, the Old River Park was opened, designed by Olmsted Associates, now under the leadership of Frederick II. The design of the Old River Park was an even more ingenious commoditisation of pioneer experience in the American wilderness.

Old River park

Old River park, developed on 140 acres of land to the south and south west of the factory in 1938, was made with very similar objectives to Rowheath park, to provide the best and most up-to-date facilities that private money could buy for a workforce that already had a reputation for having some of the best leisure and recreation facilities in the nation. The difference between Rowheath and Old River though was

in the scale, topography, variety, sophistication and sense of exclusiveness, which would have astonished observers of industrial welfare from other nations.

The design for the new park swept away all the existing landscaping made around the factory since the 1900s and replaced it with one of much greater scale and interest by creating a park of seamless variety and function. The new plan reflects social change, for example the Boys' Gardens were removed as the trend for children's gardening had passed and considerable space was allowed for car parking.

The use of space and of the natural features of the landscape was ingenious in that many amenities and functions are allowed for in a design where the separate spaces seemed to flow seamlessly into one another. The most exciting feature, and the one which most created the simulated wilderness experience, was the large meandering oval lagoon that looped around the south western half of the site, the only feature of the park that still survives.

The preliminary plan for Old River Park of 21 December 1937 and its accompanying memorandum, indicated the design conception which divided up the land into five parts, allowing for an astonishing variety of activities within the space.¹⁰⁴ **[Fig. 6.11]** On the land nearest to the factory was a parking area and covered gymnasium, a ball field for league games with grandstand and bleacher to accommodate 6000 people and a practice ball field. In addition to this was a new school. Beyond this was the athletic field for men and boys on a lower level, including a clubhouse for 1200 people. A meadow for girls and young children and hockey pitches and archery

¹⁰⁴ FLO.NHS, File no. 280-106, Plan 183 and Olmsted Brothers 'Descriptive Memorandum to accompany Plan no. 183', December 28 1937, LC.MD.OAR, Reel 257

ranges covered most of the large island formed by the oval lagoon. This was overlooked by a concert pavilion on one side, for band concerts, pageants, moving pictures and other forms of entertainment and a sports pavilion on the other, with a wading pool for children, sand courts, a shelter and 'comfort station' nearby. Beside the concert pavilion there was a canoe base so that people could enjoy the concerts from the water. On the island and around the lagoon were groves for picnics, rest and barbeques and on the north side, a lake, separated from the lagoon by an island reached by footbridges, offered another space for walking or picnicking. Each part of the park was visually and spatially unified within the meanderings of the lagoon, roads and paths, which contributed fluidity and informality to this varied landscape, while drawing each part together.

The lagoon was designed to be about eight feet deep and to provide opportunities for canoeing, boating, and outboard motor boating. There was provision for a combination boathouse and bathhouse of 3,300 sq. ft. with accommodation for storage for 75 canoes and on the second floor, enough showers and toilets for 400 people. Shelters were provided at various points along paths bordering the lagoon area and a swimming pool of 130 x 50 ft. to accommodate 600 people was to be sited near the lagoon. A deer park was also suggested, 'if such use seems desirable'. To service all this, a garage shed and maintenance yard was situated in the area north of the lake and just below Patterson Boulevard. Parking for 300 cars was made available near the factory and another car park for 210 cars was placed near the women and children's area.

A 1938 projected birds-eye view illustration of the park produced by Olmsted Associates¹⁰⁵ shows the factory situated not in a garden, but in a garden suburb and country park and playground. **[Figs. 6.12, 6.13]** One member of the Olmsted staff produced some sensitive pencil visualisations of the lagoon, with people paddling along in their canoes, (imagining they were Huckleberry Finn?), or strolling over the footbridges. **[Fig. 6.14]** Perhaps these drawings were made for the initial or subsequent presentation of the plans to their client although the President and Vice-President needed little persuasion. When Mr Dawson and Mr Parker of Olmsted Brothers visited Dayton to discuss the plans on 5-7 January 1938, Colonel Deeds, the President and the Vice-President Mr Allyn expressed great satisfaction with the plans and were ‘surprised that we were able to incorporate so many different feature in the design.’ The park offered so much, but Deeds’ decision to develop the park gradually is a clear indication that expenditure on parks and gardens was not welcomed by all employees and could even be damaging to industrial relations. Deeds suggested that by doing the works in stages, there was less chance of agitators insisting that wages should be raised rather than funds spent on a park. Initially therefore, the Board agreed to allocate \$200,000 for work for 1938, to include the lagoon area from the bridge.¹⁰⁶

Modifications to the original plan included the removal of the lagoon lake, replaced by a large oval pool, with a fountain in the centre and a cascade from the lagoon to provide water to the pool through a filtration system. This change removed some of the naturalism of the plan and gave a more modern, geometric effect to the whole site. It is not clear how close the finished layout of the park was to the 1938 illustration, as

¹⁰⁵ FLO.NHS, File no: 280z4-pt 1

¹⁰⁶ Olmsted Associates report of visit to Dayton, 5-7 January 1938, LC.MD.OAR, Reel 257

the final plan was not seen; however photographs of the building works suggest that all the major features were carried out, (no evidence has been seen of the sports areas, gymnasium and pavilions) but not all at once.¹⁰⁷ Aerial photos of 18 October 1954 show that the romance of the lagoon island had been spoilt by vehicular access and a large car park behind the picnic area. **[Fig. 6.15]** However, the adjacent suburb and parkland are both rich in trees, and the park and the naturalistic oval lagoon with picturesque bridges and islands and the log cabin shelters can clearly be seen. The landscape has not a straight line in sight. The lagoon meanders its way through the wooded landscape, widening and narrowing as it goes, creating variety in small creeks and inlets with plenty of grassy banks for picnicking boaters.

As at Rowheath Park, a huge workforce, apparently all from the works, was involved in the park's construction, which included the digging of the lagoon. They worked fast, for the park was opened on 3 June 1939. Many recreational facilities had been closed down at factories following the Wall Street Crash, but only ten years later, the employees of the NCR were given free, or low cost amenities on their doorstep.¹⁰⁸

Olmsted Associates appear to have indulged the far reaches of their imaginations and ideals in what a park should be, using some of the best ideas from American park designs to date that made allusions to a number of American landscape ideals. These included the scenic lagoon for boating and fishing, a cascade to add variety and

¹⁰⁷ The swimming pool was eventually built under the leadership of Stanley Allyn, who became CEO of the company from 1957-1962. According to Bill Anderson, President, then Chairman of the NCR from 1972-1984, it was the largest open-air swimming pool in the US. (Email correspondence with Bill Anderson, 22 July 2010.)

¹⁰⁸ Boating cost 15c per hour for members, (25c per hour for guests) and later, entry to the swimming pool cost 10c, including a towel. Guests paid an entrance charge of 10c per person plus 35c for use of the pool (or 25c for children under 60" tall). 'Old River' *Pastime* 2:12 (no date, 1938?), p. 1, NCR.DH

naturalism to the design (Jens Jensen had made cascades in his lagoon at Columbus Park in Chicago, 1915-1920) and an area for music that could be enjoyed by land or water (another feature of Jensen's design). Lagoons had been a feature of the Olmsted designs for the Chicago parks since Frederick Law the elder included one in his design for South Park (1871), fed by Lake Michigan and the entire concept for the design for the Columbian World's Exposition of 1893 was based on number of interconnected lagoons that formed a central island to provide some peace and recuperation for visitors. Lagoons continued to be a feature of the Olmsted's Chicago parks, for example a meandering circular lagoon forms the basis of Sherman Park in 1904 and other landscape architects usually included this feature in their designs.¹⁰⁹ The presence of a 'rugged' lagoon was suggestive of the American landscape, for example the wetlands of Illinois and Wisconsin,¹¹⁰ but they were not only romantic because they also functioned as a solution to drainage.

The lagoon especially gives the park a particularly North American flavour, and it is unlike an English park in other respects. There are no flower borders or formal areas and although flowers were by no means excluded from parks in America, the aesthetic of wide open spaces interrupted with trees and shrubs in naturalistic groupings is a more direct reference to the American pastoral landscape that features in so much American literature.¹¹¹ The desire in park and garden design for an 'American' style as opposed to one borrowed from Europe can be seen in the work of a number of landscape architects, including the elder Olmsted. Despite his love of the English landscape, Olmsted used mostly native plants that were suited to the climate, soil and

¹⁰⁹ See Sniderman Bachrach, J. *The City in a Garden: a Photographic History of Chicago Parks* (Harrisonburg and Santa Fe, 2001)

¹¹⁰ *Ibid.*, p. 17

¹¹¹ Marx, *The Machine in the Garden*

topography and he believed that a city park should look as much like the countryside as possible and should ideally present no evidence of the vicinity of the town.¹¹² For some, an American style of gardening became a source of national pride and identity. Wilhelm Miller in his book *What England can Teach us about Gardening* published in 1911, contrary to the title's suggestion, presents a manifesto for design and planting that is suited to the very different conditions in the US. Miller calls for Americans to cast off the shackles of England's garden heritage, however beautiful it is. When Americans stop imitating the English he concluded, 'our country will have found itself.'¹¹³

Conclusion

It is commonly said that modernist architecture and landscape became metaphors for the modern body – clean, vital, efficient, healthy, rational, moral – and that like the body, buildings should function efficiently like a machine. The parks discussed here, were modern parks in that they served the more leisured societies of modern industrial nations in a rational way. However, they were not functionalist landscapes, for as well as providing efficient spaces for organised sports, they were designed to provide a refuge from the daily rituals and routines of modern life, spaces to dream, to suspend time, to wander, as long as the rules were followed. The British workers could have almost imagined they were walking through a timeless English landscape and the Americans pretended they were pioneers in the wilderness or farmers in the pasture, but all are safe in the suburb.¹¹⁴ These landscapes were not 'modernist' in style, but they suggested a fundamental change in the relationship between the garden and the

¹¹² Sutton, *Frederick Law Olmsted*, 79

¹¹³ (London), p. 343

¹¹⁴ Simon Schama who lives in the US has described his own suburb, close to the hills and forests, but within reach of the metropolis as 'this suburban wilderness'. Schama, *Landscape*, 577

machine that made them into landscapes that expressed a modern industrial outlook. The Cadburys at Bournville and John Patterson at the NCR created a sense of place through their factory parks that symbolically combined technology, the natural and the pastoral so that nature and the machine became compatible. Although the parks were subject to regulations, they provided a variety of free or inexpensive facilities and opportunities that were easily accessible. The next chapter will discuss the ways in which the relationship between the pastoral and the technological were reinforced through photography, illustration and film in corporate publicity material.

Chapter 7: 'The Most Beautiful Factory in the World': Corporate Identity, Employee Relations and the Power of the Garden Image

Early 20th century art, film and literature depicting factory labour have tended to mythologise it, presenting either a polemical critique of man against the machine, (the films *Metropolis*, 1927 and *Modern Times*, 1940; Aldous Huxley's *Brave New World*, 1932 and Upton Sinclair's *Flivver King*, 1937) or have represented the factory as the majestic expression of modernity and the factory worker as the noble pioneer of a modernist vision (the paintings and photographs of Charles Sheeler and Margaret Bourke White and the murals of Diego Rivera). Sheeler's paintings of factory buildings are monumental paeans to modernity; as Lindy Biggs has suggested, 'he captured the growing belief in industry as the messiah for modern society and in the factory as its earthly representation.'¹

Similar myths about factories and factory life were constructed in the promotional images produced for advertising and for employee magazines. Lewis Hine's photographs of factory workers commissioned by Western Electric in the 1920s for their magazine are some of the more honest of the thousands of corporate images produced in the early 20th century because they captured some of the individual characters of the workers and emphasised the physical challenges of factory labour. However, as Elspeth H. Brown has argued, Hine's photographs became a 'utopian portrayal of 1920s labor management relations' because they idealised working lives and conditions.²

¹ Biggs, *The Rational Factory*, 167

² Brown, E.H. *The Corporate Eye. Photography and the Rationalization of American Commercial Culture* (Baltimore and London, 2005), pp. 129–146. See also Nye, D.E. *Image Worlds. Corporate Identities at General Electric, 1890-1930* (Cambridge, MA, 1985)

This chapter will examine some of the promotional images of the case studies to show how working conditions were idealised using landscaping to construct myths about factories and factory labour. Through exploiting the symbolic, metaphorical and allegorical meanings of gardens and plants, these industrialists were able, more effectively than most, to present the factory as a place of status, opportunity and communal and family values. The advertising and packaging images from the early 20th century of most of the case studies of this thesis are now iconic in the history of marketing and advertising, for it was largely through effective publicity that they became household names – Shredded Wheat, Cadbury’s Chocolate and Ovaltine for example.

Some of these images were made for external advertising and promotion. Others, such as those published in company magazines to illustrate articles on activities like outings and sports, hobbies, educational topics and events in workers lives, were designed to promote employee loyalty and pride and to improve efficiency.³ The factory landscapes were visible in all areas of the marketing systems and promotional materials including the monthly company magazine, postcards, cigarette cards and reward cards,⁴ in souvenir guides, slide lectures and films, in the press and for point of sale and exhibition stands. The factory tour and the use of planting for advertising purposes were additional methods employed to exploit the landscape as a means of reinforcing the brand. Many of the images represented company sporting activities,

³Yates, J. *Control through Communication: The Rise of System in American Management* (Baltimore, 1989), p. 17, p. 77

⁴ Cadbury produced educational reward cards depicting illustrations of tree species. Cadbury Brothers *British Tree Species Advertisements* (reward cards): (c. 1911?) Cocoa, Chocolate and Confectionery 1 (51) Bodleian Library, John Johnson Collection

but these will not be discussed because their content and meaning is more obvious and they do not invite further interpretation in this study.

The discussion will also consider how the photographs reinforce the gardens as gendered spaces and how they illustrate power relations in the factory. The images made before the First World War in particular, are representative in some respects of the social, economic and cultural dominance of one class and one gender over another and therefore are useful evidence for the relationship between management and worker in the period. Superficially the images represent the employees at ease in the gardens with a sense of belonging and so they reinforce myths about labour relations, which make them ideal as promotional tools.

It is not possible to quantify the extent to which gardens and landscape images were central to marketing and advertising strategies because a quantitative analysis of these is outside the scope of the thesis. However, the following discussion suggests that the inclusion of landscapes in the marketing and advertising material was, for some companies, a key component of the overall image of the company and products and therefore an important factor in their success. Nor is it possible to conduct a comparative analysis of the marketing and advertising strategies of my case studies in the context of developing advertising and promotional techniques in the period to see how innovative or successful their strategies were, because again this would be diverting from the objectives of this thesis. The analysis will therefore suggest that garden imagery added considerable *value* to an overall marketing and branding strategy.

Landscape imagery in corporate identity and advertising

The extent to which companies exploited landscape and gardens imagery varied according to the acreage and quality of the landscaping and the personal ‘vision’ of the company’s founder or CEO. Cadbury and the NCR were the only companies considered, which produced illustrated literature that specifically celebrated the landscaping. The Natural Food Company (NFC) in Niagara Falls published booklets giving gardening advice as discussed in Chapter 2, but these were not illustrated. The NFC also published *The Wonders of Niagara* in which views of the factory building in its landscape and factory interiors were prominent. [See Figs. 2.28; 2.29 and 3.11] However, all companies published magazines that were to a greater or lesser extent illustrated with images of the factory and its production and welfare activities that frequently included the landscapes. The success of the gardens imagery depended on an understanding of the popularity of gardens and gardens imagery and of the value of gardens and nature metaphors and how best to exploit these in pictorial forms.

Developing advertising and marketing techniques from approximately 1850 onwards, changing technologies in photography and printing and the arrival of the moving image were shaping a sophisticated understanding of the value of images in marketing and promotion⁵ and at least in the United States, advertising became a respectable and desirable profession.⁶ At the same time, the entertainment and educational value of images was reflected in changing technologies that provided new ways of viewing them, most radically with the arrival of the moving picture in the early 1900s. An understanding of the power of

⁵ See Richards, T. *The Commodity Culture of Victorian England* (London, 1991). Richards cites the Great Exhibition of 1851 as a defining moment when industrialists understood that the consumption of culture and commerce were now united as one cultural and economic form, pp. 17-18. See also Nevett, T. R. *Advertising in Britain: a History* (London, 1982); Fox, S. *The Mirror Makers: a History of American Advertising and its Creators* (New York, 1984); Ohmann, R. *Selling Culture: Magazines, Markets and Class at the Turn of the Century* (London, New York, 1996)

⁶ Fox, *The Mirror Makers*, 41

images in media was now supported by theory, as psychologists made tentative steps into marketing and advertising consultancy.⁷ Many commonly understood cultural forms and their meanings, from motherhood to holidays were exploited for marketing purposes and nature was one form that was used extensively to promote messages of health, aesthetic beauty, cleanliness, love and freedom, to name only a few.

By 1900, successful industrialists understood that images were central to a promotional culture, not only in advertising, but also in the broader realm of the brand. Images could stimulate memories and associations, educate and entertain, provide information and increase desire and certain types of images were chosen to build associations with the product. The link between gardens and foods for example, suggested health and cleanliness. The idea of the landscape and garden as a metaphor of the good life at the turn of the 19th century was nothing unusual or new, as has been discussed in Chapter 3. Nature and landscape, imbued with ideological and mythical significance commonly connoted desirable conditions such as health, beauty and godliness through idealised images of flowers, sunlit landscapes and pictures of a mythologised rural past and they appeared frequently on commercial forms and products from advertisements to Christmas cards. The ideological significance of landscape imagery in art and literature has been thoroughly explored by academics who have pointed out that oppositions were frequently set up between industrial areas as centres of corruption and the ideal village as a site of good character where the good life was assumed.⁸ Wild, uncontrolled, sublime nature was not useful to promotion and rarely seen in this form.

⁷ See Lynch, E. C 'Walter Dill Scott: Pioneer Industrial Psychologist' *Business History Review* XLII: 2 (Summer 1968), 149-170; Tadajewski, M. and Brian Jones, D.G. (eds.) *The History of Marketing Thought* (2 Vols., Los Angeles, New York, London, 2008)

⁸ Waller, P. *The English Urban Landscape*, 11-12

The site of production was important and so industrialists used images to counteract the ‘satanic mill’ image of industry and its institutions and to promote the healthy and clean qualities of their products. Perhaps the most persuasive evidence for the benefits of horticulture to sales is seen in the high visibility of gardens at world fairs and exhibitions. Kensington Gardens was found to be a suitably large and attractive enough site for the first of these in 1851 and at subsequent fairs, good landscape design became essential to a fair’s aesthetic and the Horticultural Hall was one of the most popular visitor destinations.⁹

[Fig 7.1]

The use of gardens for promotion at world’s fairs suggests that the relationship between commerce and nature was considered to be normal and by the 1930s, a number of firms valued horticulture and the aesthetic and symbolic attributes of gardens very highly to add beauty and status to their identity. The editorial and pictorial content of the company magazines also suggested that gardens and gardening were highly popular subjects. By the 1930s, the popularity of gardens as indicated in the company magazines had been replaced to some extent by an interest in the wider countryside, as the fresh air and health movement promoted outdoor activities like cycling and hiking.¹⁰

Flower images were abundant in late Victorian and Edwardian England in both popular and high culture and were associated with beauty, especially female beauty and virtue. The popularity of paintings of gardens in this period has been well documented¹¹ and was indicated in England by a school of garden painting that emerged which favoured the

⁹ See for example *Classification and Rules: Department of Horticulture: with other information for intending exhibitors Worlds Columbian Exposition, Chicago USA*. (Chicago, 1893) and *Official Book of the Fair: giving pre-Exposition Information 1932, 1933 of a Century of Progress International Exposition, Chicago 1933* (Chicago, 1932-4), Hagley Library

¹⁰ See Worpole, *Here Comes the Sun*

¹¹ Brown, *The Pursuit of Paradise* and Alfrey, *Art of the Garden*

English flower garden, represented by painters such as Frederick Walker, Helen Allingham and Alfred Parsons. The American Henry James was fascinated by this genre because for him ‘the English Flower Garden was the symbolic heart of the nation’ and he believed that artists like Parsons painted gardens in just the way Americans would like English gardens to look.¹² James’s view of the English passion for flowers as ‘the most unanimous protest against the greyness of some of the conditions’¹³ was perhaps referring to the weather, but also could have implied an industry/nature opposition and certainly, the appearance of flowers, gardens and country scenes in packaging and advertising by the 1890s, was partly designed to distance the commodity from its production.¹⁴ Images of flowers and fruits were translated onto packaging and to some extent in advertising and became agents of persuasion. A comparison of the fancy boxes of Rowntree chocolates produced in the 1880s and 1890s that targeted the female consumer, shows that the flower image was more prevalent by 1895 in sentimentalised images - garlanding figures, on women’s and children’s hats and in baskets, in cottage and other pastoral scenes, in close up vignettes, with birds on sprays, in seasonal scenes.¹⁵ For processed foodstuffs, cereals, chocolate and tinned soup, the natural reference assisted in emphasising the origin of the product and its benefit to health and energy and these also were aimed at women who were the chief food shoppers.

Although paintings of gardens were made largely for middle and upper-class markets, photographs of gardens also became popular across all classes. Family groups and portraits were frequently made in the garden. For the working classes taking their own pictures or

¹² James, Henry ‘Our artists in Europe’ *Harper’s Magazine* 79 (June 1889), 55-65 quoted in Alfrey, N. ‘On Garden Colour’ in Alfrey, *Art of the Garden*, 37

¹³ *Ibid.*

¹⁴ The Shell Company was particularly adept at suggesting in their advertising that their product gave access to fresh air and open countryside. Permanent exhibition of Shell advertising posters, 1920s and 1930s at Upton House, Banbury (National Trust)

¹⁵ B.I.R.C, HIR/9/8-14

commissioning itinerant photographers, outdoor space was a necessity since indoor photography was expensive and required large windows and space.¹⁶ Popular and society magazines about gardens and gardening were liberally illustrated with photographs and magazines like *Country Life* made the photograph of house and garden one of its key attractions.¹⁷

Images of gardens and people in gardens were therefore popular with connotations of home and respectability. Employee portraits were taken to reinforce a sense of place and belonging at the factory and in this the gardens played an important role. Before the commercialisation of flash photography in the 1920s which made indoor shoots easier and therefore cheaper, the gardens and landscapes presented a considerable advantage to companies 'well endowed' with nature for they provided plenty of opportunity and space to represent the factory environment and the workforce, at rest, in play or in portraits or group photographs. The landscape, with the office buildings behind, provided a far more attractive and resonant location for group photography than a factory yard and for companies with a large workforce, the outdoor spaces were essential for formal group photographs or representations of company social and cultural events and celebrations, due not only to the space, but to the availability of natural light. In 1912, the International Harvester Company in Milwaukee arranged for their workforce to be photographed in the playground outside the works. The factory and office building, crowned with the company name in huge letters, dominated the background. The photograph resembles a family group but multiplied many times and it reinforces the message of corporate unity and a symbol of the owner's benevolence to his workforce. The photograph also suggests a

¹⁶ Preston, R. "'Hope you will be able to recognise us': the representation of women and gardens in early twentieth-century British domestic "real photo" postcards' *Women's History Review* 18:5 (November 2009), 781-800

¹⁷ See Richardson, T. *English Gardens of the Twentieth Century: from the Archives of 'Country Life'* (London, 2005)

healthy environment due to the availability of outdoor space. But it is also an allusion to power, for the institution appears to rule over the workforce in the way that the patriarch commonly lorded over his wife and children in the traditional family portrait. **[Fig. 7.2]**

For a number of the case studies, the image of the factory itself, embellished by its landscape, was frequently seen in promotional literature and sometimes in advertising and packaging. Since the early industrial revolution, engravings of factory buildings in a landscape, cultivated or otherwise, were often to be found in promotional literature or in the press and for souvenirs. By the 1900s illustrations of the landscaped factory and office buildings were appearing on a greater range of illustrated promotional materials, often in colour and including factory souvenir guides, postcards and packaging and in the case of the NCR Company, on their letterhead. **[Fig. 7.3; 7.4]** The reality of the factory with its landscape and planting also became an advertisement as the best view was presented from the adjacent railway line or canal, often with the name of the company laid out in bedding plants.

The Shredded Wheat Company in the UK made one of the boldest and most innovative uses of architectural and landscape imagery in advertising promotion. The landscaped factory image appeared on its packaging, advertisements and on show cards for window displays and exhibitions and this continued into the 1930s and beyond. **[Fig. 7.5]** But in addition to this, an elaborate birds-eye-view illustration of the factory was used for the company vehicle livery. A photograph taken outside the Welwyn factory in 1929 shows a fleet of delivery vans displaying the image across sides of the vans. **[Fig. 7.6]** Although this factory was architecturally innovative and striking, the livery and packaging illustrations idealised the surrounding landscape. The building gleams white against a background of green lawns and fields and the poplars that line the driveway are in full summer green.

Behind the factory a steam train chugs past in what looks like an illustration from a children's storybook. **[Fig. 7.7]** The Shredded Wheat Company archive in the UK (now Nestlé) contains a number of copies of painted illustrations that reinforce the myth of the factory that were presumably used for postcards, advertisements, on packaging and in the promotional literature. **[Fig. 7.8]** In contrast, some of the contemporary black and white photographs of a similar view of the factory reveal the approach to and rear of the factory to be almost scruffy. **[Fig. 7.9]**

Like the Shredded Wheat Company, the Cadbury Brothers made extensive use of images of their factory by the 1920s, using artwork, hand-coloured and black and white photographs that were reproduced on some packaging (chocolate tins), in the company magazine and in their numerous brochures and postcards. **[Fig. 7.10]** Photographs and illustrations of the landscapes were reproduced most liberally in the company magazine and in souvenir guides, published to present to factory visitors who came in increasing numbers from the early 1900s. Between 1900 and 1950, Cadbury published six visitor guides, most entitled *The Factory in the Garden* and a number of other booklets describing and illustrating the social and sporting facilities, including *Bournville. A Review* (1921) and *The Factory and Recreation* (1925). **[Fig. 7.11]**

Like Shredded Wheat, the Cadbury illustrations are highly stylised and naïve, but Cadbury tended to use many more photographs than illustrations in their printed material, at times commissioning photographers with some considerable artistic mastery as well as competent designers, so that the communication value of their printed matter was very high and their gardens and landscapes shown off to best effect.

There is evidence in the archives that some of the images of the factories and their landscapes produced in promotional literature were not authentic, for some photographs are retouched, or altered in the process of copying them for illustration. The consumer is the victim of a lie. Photographs in the Rowntree and Ovaltine archives reveal that art editors manipulated photographs using re-touching techniques to exaggerate the extent of the garden surroundings to support and promote the 'garden factory' ideal. [See Fig. 3.7] This kind of image manipulation was far from unusual, but it shows the extent to which the image of the garden factory mattered to the companies, since they were prepared to massage the evidence to present an idealised view. The NCR Company and Cadbury also manipulated images to a great extent by hand-colouring black and white photographs and lantern slides, which enabled them to show off the landscapes to best effect on promotional literature like the front cover of the company magazine. However, the coloured lantern slides had another important role in the company's marketing strategy, to present visual pleasure and information in their factory lectures.

The factory tour, factory lecture and factory film

The image of the factory in a garden was reinforced in print particularly in corporate literature and to some extent in packaging. Other promotional devices used at factories where the gardens played a vital role were factory tours, lectures and films. Their patrons regarded these as another form of advertising and so it is surprising that these methods appear to have been marginalised or ignored in histories of marketing.¹⁸ Archival evidence suggests that tours and lectures and for some companies film, were considered to be key components of their marketing strategy, and for those who practised these methods most extensively, notably the larger companies like the Natural Food Company, Cadbury,

¹⁸ Tadajewski and Brian Jones *The History of Marketing Thought*

Rowntree and the NCR, the landscapes were essential to their success. The image presented on visits to the factory was one of the ways in which identity was controlled and although the visits took place in real time and space, the way they were conducted was managed in very similar ways to the art direction of the photographs and illustrations. The photographic and later the film image was also an important component of the tour, because either the visitors were offered a lecture or film as part of the tour (by the NCR), or they could take away brochures and postcards of the factory to reinforce the positive message.

There is substantial evidence of very regular visits by large numbers of people to model factories by the late 19th century. These included fellow industrialists and their representatives (often incognito), economists, philanthropists, sociologists, the press, royalty, politicians, reformers, social and amenity groups and other interested members of the public. Industrial sightseeing to factories and mills had been common since at least the middle of the 19th century and the spectacle of a remarkable feat of engineering like a tunnel was known to be a crowd puller.¹⁹ By this time, an interest in national and international industrial prowess was being nourished by the popular spectacle of industrial world's fairs. By the second half of the 19th century, the types of visitors that began to arrive in ever-greater numbers were tourists and educational groups, now with more money, education, leisure and transport. By the early 20th century companies began to organise the factory tour more professionally to create a complete 'visitor experience' and the experience could be re-created or replicated in film. The well-managed factory tour and lecture became part of the marketing and advertising revolution of the 1890s and early 1900s, closely followed by factory films. In an increasingly media-saturated and mobile

¹⁹ Two million people visited the Thames Tunnel when it opened in 1843, despite the charge of one penny. Flanders, J. *Consuming Passions. Leisure and Pleasure in Victorian Britain* (London, 2006), pp.260-1

society, endorsements of a brand through press reports, word of mouth and the distribution of factory guides, postcards, lectures and films all made a contribution to brand awareness.

The professional factory tour for very large groups of visitors was likely to have been inspired by American initiatives in establishing professional departments that trained and managed teams of factory guides dedicated to looking after visitors. It is also clear from the case studies, that the factory landscapes were key elements in the visitor experience. The claims to be the 'Factory in a Garden' (Cadbury, Spirella UK, Ovaltine) or 'The Most Beautiful Factory in the World/The World's Finest Factory' (Pullman, NFC and the NCR) would not have been possible without the landscapes, which provided aesthetically attractive settings for the factory, and also exterior space where groups could be progressed around the grounds. George Pullman employed a full-time estate manager and his wife to work on public relations and one of their most important functions was to show visitors around the Pullman estate.²⁰ The NFC at Niagara Falls was designed to impress both inside and out with its grand visitors' reception hall, decked with palms, a roof garden overlooking the Falls and specially constructed balconies and aisles from which to view the production process. From the moment the factory opened its doors in 1901, the public were invited to come to the 'world's finest food factory' open every day except Sunday with a free tour. Within a few years, the factory had more than 100,000 visitors per year and in the honeymoon season as many as 500 couples per day visited.²¹ According to William Cahn, author of the company history, the guest book reads like a *Who's Who* of notables throughout the world.²²

²⁰ Adelman, *Touring Pullman*, 26-7

²¹ Irwin, *The New Niagara*, 201

²² Cahn, *Out of the Cracker Barrel*, 215

The Cadbury firm professionalised their factory tours at Bournville following a special board meeting to hear George Cadbury Junior's report of his two-day visit to the NCR in October 1901,²³ although they already had their factory visits down to a fine art.²⁴ The factory tour organised for 60 journalists and their wives from across the nation in September 1901 was carefully stage-managed and resembled ambient theatre in which the gardens provided the scenery. The journalists, some of whom had arrived from London by specially chartered train were first taken to admire Bournville Village and then walked past the almshouses with 'their pretty gardens' and towards the factory through the Girls' Grounds. The visitors were lavishly entertained to lunch and tea and for those travelling home by train, to dinner. Not surprisingly, the visit had the desired effect for the journalists were ecstatic in their praise. In subsequent press articles, pasted into a leather bound book now in the Cadbury archive, the factory was called a 'Beauty spot', a 'picturesque castle' and a 'country house.'

From most of the windows one looks out on trees and gardens – there are gardens everywhere'. 'The gardens were ablaze with flowers, the fruit trees (the apple and pear) still bearing their harvest, whilst the rich autumn tints on the creepers and foliage round the picturesque houses made a beautiful picture.'²⁵

The coverage of this visit in the national press with almost universal praise must have demonstrated the value of well-managed tours. The visitor department inspired by the NCR that opened two years later, managed the growing numbers of visitors whose tour included visits to the factory floor, the Girls' Grounds, the recreational facilities and

²³ Visitors per month to the NCR rose from 1800 in May 1898, to 2,500 in September 1902 and 9,252 in June, July and August of 1903, thus almost matching the numbers visiting the Natural Food Company, which had the additional attraction of the Niagara Falls. See '1800 people inspect the model factory' *NCR* (June 1 1898) p. 202; 'Factory visitors' *NCR* (October 1, 1902) p. 760 and 'Nine thousand visitors' *NCR* (September 1 1903) p. 509, NCR.DH. See also Tolman, *Social Engineering*. Tolman visited the NCR in 1898, staying for ten days.

²⁴ 'Special Meeting' (8 November 1901)' Committee of Management Minute Book 2 1900-01', p. 149, CB, C301. Other visitors at that time were Robert Winning and E.A. Deeds of the Natural Food Company (later the Shredded Wheat Company). 'Prominent Visitors' *The NCR* (15th October 1901) p. 444. Arnold Rowntree had visited the NCR Company in 1900, NCR.DH

²⁵ 'Visit of the Press to Bournville September 24 1906', CB, 024 003225

Bournville Village and a cup of tea. After the new dining hall was constructed in the early 1920s, visitors were entertained in their own reception centre and tearoom. Factory tours, for VIPs and the general public became an almost daily feature of factory life. By 1932, the Cadbury firm employed a team of more than 150 specially trained factory guides with visitors numbering 150,000 per annum²⁶ and at the end of the tour they could take away postcards and souvenir guides filled with photographs. (Visitor numbers peaked in 1938 with 163,000 visitors.²⁷)

Lantern slide lectures were given as part of the tour schedule.²⁸ John Patterson regarded his factory lectures to be a vital part of the company's advertising strategy, 'NCR advertising is teaching', he said, for he believed that the lecture played a decisive part in advertising his entire institution, not just the product.²⁹ Lectures, like 'The Factory Lecture' and the 'Landscape Gardening Lecture' were designed to reinforce the message and the brand already introduced on the tour, repetition in a different format being a tried and tested educational method.³⁰ Patterson himself was involved in preparing the lectures, giving advice on how best to communicate with word and image.³¹

The NCR built up a magnificent collection of lantern slides to illustrate the lectures and opened special departments for preparing them.³² The Cadburys did the same, following the younger George's visit to the NCR in 1901 where he had been given the 'full treatment'

²⁶ 'The Story of the Visitors' Department' *BWM XXXVII*: 5 (May 1939), pp. 144-48, CB

²⁷ Hoffman, 'Imaging the Industrial Village', 91

²⁸ The Lantern Lecture Bureau at Cadbury loaned slides to social workers, clubs and societies and any other interested party. See Lantern Lecture Bureau 'The Bournville Lantern Slide Lectures', insert in *The Factory in a Garden* (c. 1932), CB

²⁹ 'Advertising is Teaching' *The NCR XVII*:1 (June 1904), p.36, reprinted from an article by John Patterson in the *Dayton Journal* (21 May 1904), NCR.DH

³⁰ By the mid 19th century, the educational lecture using glass slides had become common in cities. See Flanders, *Consuming Passions*, 266-271

³¹ Typescript of notes, following meeting with Patterson to discuss the lectures, no date, NCR.DH

³² Cook, E. W. *Betterment, Individual, Social and Industrial* (New York, 1906), p. 222

of tours and lectures by the visitor department there.³³ (Most of the NCR and Cadbury lantern slides are intact and in the archives.) By 1904, the NCR had created 10,000 slides and almost a third of these, approximately 3000, illustrated ‘landscape art’.³⁴ The ‘Factory Lecture’ showed images of the Olmsted’s cosmetic landscaping and the Boys’ Gardens, alongside extensive images of the welfare provision within the factory, including social, educational and medical facilities. [Figs. 7.12, 7.13] Lectures were given using a new technological development in image dissemination, the stereopticon projector, which displayed two and by 1900, three images at once. The NCR must have been one of the first companies in the US to use ‘moving pictures’ for promotional purposes because in 1902 or 1903 they employed one of the first film companies in the US to produce films of the factory. The slides and films were used for giving lectures on site to the workforce and to visitors, and also were taken to numerous other sites at home and abroad by Mr Patterson himself and by a team of specially trained lecturers (a team of 28 people worked in the slide and lectures department).³⁵ In April 1899, W.H. Lever and some of his company joined up to 300 others to hear the NCR ‘Factory Lecture’ in the ballroom of the Waldorf Astoria hotel in New York and shortly afterwards, Lever shared a platform with a representative from the NCR at the ‘Get Together’ Club in New York with his own lantern slide lecture on Port Sunlight.³⁶ These events clearly had the desired effect for the following year Mr Patterson visited Port Sunlight and gave the lecture to the workforce there.³⁷ (Following a viewing of the NCR factory lecture Seebohm Rowntree wrote to them asking for advice on welfare schemes.) It is not known how often the NCR factory lecture was given in Britain or elsewhere but a slide in the archive that shows a packed house

³³ Cadbury ‘Special Meeting’ (8 November 1901), p. 149, CB, C301

³⁴ NCR *Art, Nature and the Factory* (1904), NCR.DH

³⁵ The NCR loaned slides and films to the IWS in Britain.

³⁶ ‘The Factory Lecture and its Results’ *NCR* (1 May 1899), p. 238, NCR.DH

³⁷ ‘Mr Patterson and Port Sunlight’ *Progress, the Port Sunlight Monthly Journal* 1:1 (October 1899), p. 35, PSVT.SV

listening to one in Leeds Town Hall suggests that the company generated considerable interest abroad. Another opportunity for giving the factory lecture was provided by the trade fair and exhibition. At the St Louis World Fair in 1904, the factory lecture was one of the entertainments provided on the NCR stand. (Visitors to the stand might also have been impressed by a 28 x 6 ft. painting of the factory and its environs that hung on the back wall.)

The 'Landscape Gardening Lecture' (50 slides) promoted all the landscaping schemes around the factory and district and provided instruction in techniques of landscape gardening. [See Figs. 4.16 and 4.17] The script emphasises the role of the Olmsted firm together with advice from Professor Bailey of Cornell University, in transforming the landscape and teaching the members of the company and the neighbourhood about landscape gardening. The audience was advised to 'avoid the unnatural Italian style' of gardening and 'stick to the natural.' The NCR 'ABC of Landscape Gardening' showed the audience how best to plant their own gardens. [Fig. 7.14]

A favourite illustrative device in the landscape lecture was the 'before' and 'after' image showing, for example, the Boys' Garden before and after planting, or an untidy Dayton sidewalk adjacent to the factory, scarred by scrub and advertising hoardings, followed by the same site laid to lawn and shrubs. [Fig. 7.15] These were reinforced with images showing the effects of the gardens on the neighbourhood youth and potential employees. [Figs. 7.16, 7.17, 7.18] Significantly the 'before' pictures are in black and white, which make the coloured 'after' pictures even more compelling and persuasive. (See also Figs. 3.13; 3.14) The images and the way they were presented were designed to surprise and to confront or overturn the expectations of the audience. In the 20th and 21st centuries, many

advertisers and filmmakers increasingly relied on ‘the unexpected’ (or today ‘the shock factor’) to capture their audiences, and Patterson understood this technique to great effect. However, the ‘before’ and ‘after’ photographs as instruments of persuasion are likely to have been suggested by the Olmsted. Timothy Davis has shown how Frederick Law Olmsted and Calvert Vaux ‘updated’ Humphry Repton’s original technique³⁸ to promote their plan for Central Park, New York. Subsequently, this became a favourite device amongst landscape architects and other reformers in the early 20th century who used more extreme images of ‘ruin and redemption’ as tools of persuasion to ‘manipulate form and content to validate their social and political agendas.’³⁹ The photographs of the Bronx River Parkway that form the subject of Davis’s article look identical in their subject matter and framing to the NCR photographs and were likely to have been just as effective in suggesting the power of landscape and planting in promoting respectable environments.

It has not been possible to see the NCR films before the 1940s, but three promotional films made by Cadbury remain in the archive at Bournville. They all show extensive footage of the recreation grounds and the activities that took place there to reinforce the message of the ‘Factory in a Garden’.⁴⁰ The film made in about 1921, ‘Elsie and the Brown Bunny’, which is based on *Alice in Wonderland*, tells the story of Elsie who is taken by the rabbit (male, wearing a waistcoat) to visit the chocolate factory and its grounds. The film turns the Cadbury grounds and factory into a wonderland of adventure although the ‘spell’ is broken as Elsie and her guide chance upon a group of Cadbury girls in gymslips exercising on the pergola steps in the Girls’ Grounds. The film takes on a disciplined tone as the

³⁸ In the early 19th century, Repton used before and after images in his Red Books to demonstrate his proposed alterations to country estates.

³⁹ Davis, T ‘The Bronx River Parkway and photography as an instrument of landscape reform’ in *Studies in the History of Gardens and Designed Landscapes* 27:2 (April - June 2007), 113-141

⁴⁰ See the Cadbury films: ‘July 26th 1911 British Medical Association visit to Bournville’; ‘Elsie and the Brown Bunny’ (c.1921); ‘The Story of Bournville as Told by the Nightwatchman’ (1921), CB

‘Cadbury’s Angels’ march, military-style down the path to the saluting hero and heroine. In the film, the factory has a dual identity: it is both a storybook fantasy in which nature and gardens play a major role, and an efficient, healthy and respectable production facility. The consumer is drawn into a web of associations between nature, childhood innocence, the company, its products and employees.

The motivational power of gardens imagery and the representation of childhood, gender and class

Having identified how the image of the garden was used to shape company identity, the discussion will now look more closely at the meaning of some of the gardens photographs in which the workforce appear for these, like the Elsie film, effectively communicate the image and values of a garden factory. The analysis will show how the industrialists and their photographers drew on symbolic, metaphorical and allegorical relationships between people and gardens in order to project their intended messages of status, respectability, health and virtue, but the discussion will also disclose how the photographs are, to varying degrees, ambiguous. A retrospective reading of the images and a comparison of images over several decades, reveals a more complex relationship between worker and master in the period than the initial impression suggests. As Raphael Samuel has argued in his evaluation of photographs as evidence in historical analysis, they tend to ‘construct an iconography of the national past’.⁴¹ Victorian photographs of industrialists and their workers, he argued, tend to present the boss as benevolent, the male worker as heroic and the female as ‘robust’ and ‘respectable’.⁴²

⁴¹ Samuel, R. *Theatres of Memory Vol 1* (London, New York, 1994), p. 323

⁴² *Ibid.*, p. 328

Superficially, photographs appear to represent reality in the way that paintings and illustrations do not. Theorists of photography, from the early years of its invention to the present day have been preoccupied with the question of the ‘truth’ of the photograph. Roland Barthes in *Camera Lucida* has suggested that photography is more like theatre than painting, - a kind of ‘tableau vivant’ and that the ‘photographic referent’ is not the same as the referent in other forms of representation for there is a ‘real thing’ in front of the lens. However, in his analysis, Barthes does not take account of the role of the client, the art director, the photographer or the subject itself in controlling the photographic shoot and therefore the photograph’s meaning.⁴³ Susan Sontag by contrast emphasised the role of the photographer in creating what she terms ‘Everyday life apotheozised’, or as ‘not as what is “really” there, but as what I “really” perceive’.⁴⁴ In simple terms Sontag meant that a photograph is not only an interpretation of life through the photographer’s eye and through the lens but also through the eye and interpretation of the audience.

Photographs can be seductive and compelling artefacts, particularly when the researcher is seeking to find some ‘truths’ about the past, but despite some elements of fact and realism in photographs – the location of a lily pond, or the position of a pergola for example – the photographer and others involved, the client, the art director, even the subject, have considerable power to manipulate the image. This is not to say that some ‘truths’ can never be found in a photograph, as Walter Benjamin very eloquently put it in his essay ‘Little History of Photography’:

No matter how artful the photographer, no matter how carefully posed his subject, the beholder feels an irresistible compulsion to search such a picture for the tiny spark of contingency, the here and now, with which reality has, so to speak, seared through the image character of the photograph.⁴⁵

⁴³ Barthes, R. *Camera Lucida: Reflections on Photography* (London, 2000), pp. 76-77

⁴⁴ Sontag, S. *On Photography* (London, 2008), p. 90, p. 120

⁴⁵ Jennings, M.W., Doherty, B., Levin, T.Y. (eds.) *“The Work of Art in the Age of its Technological Reproducibility” and other Writings on Media* (Cambridge, MA, 2008), p. 276

This helps to explain why Lewis Hine's 'worker portraits' taken on the shop floor, seem to have an emotional impact that is rare in promotional images of factory workers for Hine tried, partly successfully, to capture the 'reality' of factory labour. By contrast, the locations for the photographs discussed below, commissioned by Cadbury, Rowntree and the NCR between c1900 and c1920 are the company gardens, which create a distance from factory labour. They are art directed to manipulate an image of factory life that is far removed from the reality of factory work.

By the early 20th century, photography was becoming increasingly popular and available, but it was relatively rare for blue-collar workers to see published images of themselves. Ohman argues that the scarcity of pictures of the working or underclass in magazines in the 1890s and 1910s was due to a reluctance to stress the reader's unjust economic privilege and that there was a 'feeling that to look with the camera man inside tenements and factories would be to contaminate the flattering placement of readers in sites of beauty and dignity that was affected by the great majority of photographs.'⁴⁶

Therefore, by creating pictorial photographs based on a genre of middle-class domestic life, companies implied a high-status worker designed to flatter employees and also to reassure the consumer that life in the factory was really quite pleasant. One type of photo genre that was adopted at the factory was the subject looking out of, or framed by a window that overlooked the garden. [Fig. 7.19; 7.20] Images depicting the subject gazing out of the window at the garden were popular in the period as they suggested the possibility of redemption through gardens, a recurring subject in popular books like Elizabeth Arnim's

⁴⁶ Ohmann, *Selling Culture*, 238

Elizabeth and her German Garden (1898) and *The Garden of a Commuter's Wife* by Mabel Osgood Wright, published in the US in 1901.⁴⁷ In the frontispiece of the latter book, the subject gazes wistfully out of the window, but whereas this languid figure is clearly a woman of leisure, the photographs of the workers at their windows are so framed and posed to appear to be enjoying the benefit of the view while engaged in their working day or eating in the works dining hall. The photographs suggest through composition, pose and lighting and reinforced by the caption, that the worker is fortunate to have access to and inspiration from open space which are the luxuries of a pre-industrial past or a middle-class present.

Photographs of the workers at rest, play or work in factory gardens and parks are numerous in some archives and the tone and message of the photographs depends on the specific values that the company placed on their gardens. The Cadbury and Rowntree publications and archive contain many images of women and girls in their own grounds, especially in the 1900s and 1910s, while the NCR places more emphasis on their Boys' Gardens and the gardens of the workers who lived near the factory. From around 1900 to 1920, the spaces are clearly gendered. Women are mostly photographed passively enjoying the gardens, or doing gentle exercise or dancing, while the men and boys are being productive and active, playing sports, doing drill or gardening. **[Fig. 7.21]** By the 1920s and 1930s, there is more emphasis in all of the case studies on the men, women and their children mixing more informally in the less private parks that were made for the workforce and their families from the 1920s onwards. The strong gender differentials therefore were based on typical notions of masculinity and femininity that are reinforced by the garden or landscape

⁴⁷ See Hapgood, *Margins of Desire*, 103-5

setting. In addition, the images of children in the factory gardens reflect late 19th century attitudes to childhood and these in turn are gender specific.

The Cadbury and Rowntree photographs of their female workers are highly controlled, perhaps due to Quaker values or simply because they copied each other's photographic styles. (There was much professional contact between the rival firms.) Photographs taken at other firms, for example those of the women in the gardens of the Spirella Corset Company are also formally posed and controlled, but they lack the poetic allegory of the chocolate manufacturers' images. Not all the subjects in photographs are controlled however, or even in formal groups. In **Fig.4.3**, showing some of the female workforce of the Jacobs factory taking the air on the factory roof, they are almost 'larking about' and some are looking directly at the photographer and a picture of some of the female Ovaltine workers in their garden is similarly informal. [See **Fig. 7.29**]

Some of the Cadbury photographs are striking in their use of powerful allegorical and metaphorical scenography and body language, which suggest that the photographer had some artistic knowledge and temperament. They create a romantic ideal of womanhood, innocent, compliant and content, which makes them effective from a marketing point of view. [Fig.7.22] Methods of representation in these photographs were shaped by a number of factors, some which have their origins in movements and styles of painting and others that derive from customary practices of photographic portraiture. As was suggested in Chapter 3, gardens and gardens imagery that contained the human figure in the late 19th and early 20th centuries, were replete with symbolic and metaphorical messages, often about the relationship between man, woman and nature, many of which have ancient origins, some

biblical. (Port Sunlight was referred to as ‘The Garden of Eden’.⁴⁸) The ideal of female virtue and domesticity was a favourite subject, often with the woman of the house in retreat in her garden and the garden itself symbolic of female beauty and submissiveness, an image that has its origins in the Virgin Mary in her ‘hortus conclusus’. [Fig. 7.23] The garden image also had the potential to suggest ideas of bodily freedom and emancipation, either in Arcadian scenes of women dancing or picnicking in gardens, or in photographs of middle or upper-class women garden makers, such as those who were photographed in their gardens for gardening magazines published around the turn of the century.⁴⁹ The relationship between nature and female sexuality was also a common theme, (Eve and Eden) disguised by some of the Pre-Raphaelite painters and photographers using religious or classical themes, or more overtly displayed in some Aesthetic and Art Nouveau paintings and illustrations. In the photographs of the ‘Cadbury Angels’, the white dresses and controlled poses, combined with the elegant formality of the garden with its symbol of purity and baptism (the water, pond and fountain), construct a compliant, respectable, even virginal image of the Cadbury’s Angels. [Fig.7.24] This is clearly the image of the Cadbury girls that the company wished to project, but it would have been far removed from the reality of many of their employees’ lives. In addition, the photographs did not necessarily reflect the true relationship between employer and employees, as we know that even in a popular company like Cadbury, relations were not always easy.⁵⁰ (The author has written further about the Cadbury photographs in the article referenced below.⁵¹)

⁴⁸ ‘Port Sunlight a Garden of Eden’ *Progress* 1:12 (September 1900), p. 498

⁴⁹ Richardson, *English Gardens*

⁵⁰See Samuel, *Theatres of Memory Vol I*

⁵¹ Chance, H. ‘The Angel in the Garden Suburb. Arcadian Allegory in the Girls’ Grounds at Cadbury, Bournville 1880-1939’ *Studies in the History of Gardens and Designed Landscapes* 27:3 (2007), 197-216

The NCR images of the Boys' Gardens

There are relatively few photographs of the female workers at the NCR enjoying the grounds in the early 1900s as the company, driven by their patriarch, was more interested at this time in promoting the 'Boys' Gardens' and to a lesser extent the girls' allotment garden that was created some years later. The many photographs of the Boys' Garden were taken for a similar purpose to those of the female workers at Cadbury and Rowntree, to show off the munificence of the company and commitment to social welfare and the benefits of the gardens and for the factory lectures. However, an analysis of these photographs reveals similar ambiguities about the relationship between master and worker and as well as between adult and child.

In most respects, the photographs of the boys on their plots at the NCR are a stark contrast to the by then familiar pictures of children labouring in factories, or crammed together in squalid streets. (Jacob Riis toured the country with his illustrated lectures, including a visit to the NCR, until his death in 1914.⁵²) They are clean, healthy and surrounded by the fruits of their labour, although some are barefoot. **[Fig.7.25]** However, in many of the photographs, the boys look uncomfortable, even miserable and always closely controlled. Boys are photographed working or posing in the NCR garden, under strict supervision. **[Figs. 7.26 - 7.28]** The extent of available space for the gardens is emphasised by the careful positioning of the boys who are at attention in their plot, frozen for the camera. They are ill at ease in their surroundings and the bowler-hatted supervisor appears to be a threat to any misdemeanour. In 'The Bean Crop' photograph, most of the boys are wearing unnaturally clean white or light-coloured shirts even though some have no boots. Although smiling was uncommon in a photograph until shutter speeds became faster, the boys appear

⁵² Pascal, J. *Jacob Riis: Reporter and Reformer* (Oxford, New York, 2005), p. 160

to be far from proud of their bountiful crop. The final photograph in this series is the least realistic of all. Wearing their Sunday suits, the boys show off the corn harvest, but there is no sense of pride in their yield, their body language is awkward and they are almost a 'picture of misery'. In their attempt to turn the former Slidertown delinquent into the future model worker, to cultivate the compliant, responsible young man through productive nature and hard work, the NCR appeared to exert considerable control on the boys. They used the 'carrot and stick' method by allowing the boys to manage their own garden company and by awarding numerous prizes for best garden and produce but any boy who did not meet the standards of behaviour and attendance expected, lost his right to a plot.

These photographs cannot be read as 'true' representations of the reality of being a boy gardener at the NCR just as the reports of their activities in the company magazine and in the *Boys' Garden* booklet cannot present the real picture either. The self-congratulatory tone of the *Boys' Garden* publication that includes boys' testimonials on the benefits of the garden does not comply with the mood of the photographs. The rare colour autochromes of the boy gardeners taken by Arnold Genthe around 1911 [See Fig. 2.26] represent a more pictorial, natural and benign picture of the boys in their gardens, as they are less posed and some boys smile meekly at the camera, but in reality there was likely to be a wide variety of emotion and experience amongst the boy gardeners working at the NCR.⁵³ Above all, the photographs suggest, through composition and body language, a high level of control and supervision imposed on the boys in what was effectively their free time out of school, so they could not escape adult authority. It is ironic that progressive reformers believed that play should be encouraged for the middle-class child, while hard work in vocational

⁵³ See Rosenblum, N.A. *World History of Photography* (London, New York, 1997), p.304. Some of these photographs are in the NCR archive in Dayton and others, including portraits of the Patterson family, are in the Library of Congress, Washington DC.

education was the solution for working-class youth,⁵⁴ although, this attitude began to change in the early 20th century and playgrounds were built in working-class areas.

Changes in imagery in the 1920s and 1930s

In the attempt to publicise the benefits of gardens and fresh air to factory workers and to the public, the photographs produced were appealing visually, but they are ambiguous for they are highly controlled, they do not necessarily represent the reality of worker's attitudes and nor do they suggest real enjoyment of the gardens. However, by the late 1920s and 1930s, although still photographed in controlled environments, there is a suggestion of more objective truth in the way the workforce was represented and of an easy-going, even positive attitude to the factory parks and gardens.

The more relaxed attitudes to male and female relationships after the First World War are reflected in some significant changes in composition and mood in the photographs of the 1920s. In the picture showing a large group of female employees from the Ovaltine factory (c. 1920), the women seem to have almost tumbled out onto the tennis lawn, and although they are partly posed, they appear to be teasing or disobeying the photographer and preoccupied with amusement and the enjoyment of their freedom. **[Fig.7.29]** There is far more 'truth' in this photograph than in the Cadbury ones from the 1910s, for the girls display their individual personalities. In another photograph taken at Ovaltine, a group of women are crowded into a charabanc outside the factory, setting out for a company outing and this time there are two men amongst them, including the driver. Again there is naturalness to their expressions; they are all looking at the camera unselfconsciously and

⁵⁴ Macleod, D. I. *The Age of the Child: Children in America 1890-1920* (New York, 1998) and Boone, T. *Youth of Darkest England: Working Class Children at the Heart of Victorian Empire* (London New York, 2005)

some are smiling. **[Fig.7.30]** By this time, external space appears to be less tightly supervised and controlled and the women are more at their ease.

There is also a dramatic contrast between the photographs of the Cadbury workforce in the gardens in the 1890s to 1910s, and those enjoying their parks in the late 1920s and 1930s. In the later photographs, men and women are freely mixing in the Rowheath pleasure grounds, not sedate single-sex waltzing as twenty years before in the Girls' Grounds, but throwing their limbs about, presumably to the sounds of jazz. (In all the case studies, photographs of the female and male workforce socialising in the gardens, or even communicating at all are absent until the 1920s.) The photographer has chosen his position on the pavilion roof, framed his shot, taken a light reading and decided on 'the decisive moment'⁵⁵ to press the shutter, but apart from programming his equipment and framing his shot, the photographer has little control over the subjects, who appear to be unaware of him. **[See Fig. 4.10]**

Another example of change is a photograph on the front cover of *NCR News*, April 1925 showing two women, posed, but with relative naturalness and abandon, beside the lagoon in the NCR's Old River park. They look much more independent and confident in themselves than their predecessors from twenty years before. **[Fig. 7.31]**

Another photograph published on the October 1925 issue has a similar mood. The women are at ease in front of the camera and also by now perhaps influenced by watching their favourite films, for they seem to be striking film star poses. The women look glamorous, there is less deference to the photographer and this time they appear to have ownership of the landscape for they are fully at their ease. **[Fig. 7.32]**

⁵⁵ This phrase is synonymous with Henri Cartier-Bresson from his book *The Decisive Moment* (New York, 1952), first published in French in the same year as *Images à la Sauvette*.

By the 1920s, the camera, and film in general, was much more a part of people's lives, they were easier to use and photographs were more affordable and treated with less reverence. The NCR and Cadbury were by this time inviting submissions of photographs from their workforce for publication in the company magazines.⁵⁶ The archive of Letchworth Garden City has inherited a family album of photographs taken by the Spirella gardener of his daughters cheerfully posing on the factory roof garden in the 1930s. There is more 'truth' and authenticity in these images than in photographs contrived by the factory management for publicity and promotional purposes. They changed to represent a more modern image of the industrial worker; one who now had more access to middle-class values and lifestyles, more of a stake in the capitalist process and more social and political power.

Conclusion

The company photographs and illustrations of the gardens and recreation grounds and those using them were made and published with an agenda in mind, to promote the company and its products. It has been argued that these images communicated powerful messages about the value of the gardens and that the photographs give considerable insight, through their unique form of communication, into attitudes of the management to the workforce in the period. While the photographs do give valuable information about how the workforce used the gardens and recreation grounds, they do not assist us with information about the workforce's attitudes to the recreation spaces, or how often they used them. The photographs are not a good reflection of the power within the workforce to make their own decisions about using the spaces, or how much they enjoyed them. However much the landscapes and their uses were celebrated in the promotional materials, the workforce

⁵⁶ 'Snapshots Wanted' *NCR News* IX: 4 (April 1923), p.1, NCR.DH

always had the right of lack of interest or veto. The next chapter will re-visit questions about the extent to which the workforce valued or benefited from the landscapes.

APPENDIX 1: CASE STUDIES

- These sites have all been visited, with the exception of Shredded Wheat at Niagara Falls.
- Major case studies are in bold. Company archives have been consulted.
- In most cases the dates give the foundation of the company or the construction of the factory. Dates of landscapes are given where known.

Date	Company	Location	Summary
1746	William Champion's brassworks	Warmley, Gloucestershire, UK	Grotto, wall and statue in Champion's garden built with by-products of zinc smelting process.
1784	Samuel Greg, Quarry Bank Mill and village	Styal, Wilmslow, Cheshire, UK	Apprentice House garden. Village houses with gardens.
1800	New Lanark, Mill and village	New Lanark, Lanarkshire, Scotland, UK	Village laid out with gardens and walks. Allotment gardens. Playground for children outside the Institute where they were drilled.
1851	Saltaire Mill and village	Near Bradford, West Yorkshire, UK	Smaller houses had no gardens, some larger houses had small front gardens. Allotments in front of factory. Public park opened in 1871. Remodelled by William Gay in the 1890s.
1878	Cadbury	Bournville, near Birmingham, UK	A playground for women and a sports ground for men from the start. From 1896, Girls' Grounds, Men's Recreation Ground and kitchen gardens. Re-landscaped by Cheals, 1907. Boys', Girls' and Men's allotments.

			<p>Factory offices and workrooms copiously supplied with flowers and plants.</p> <p>Early 1920s, new buildings and glasshouses built in kitchen gardens for Gardening Department.</p> <p>1924-37 Rowheath Park.</p> <p>1933, formal garden outside dining hall with fountain and statue.</p> <p>1937 Rowheath lido, replaced in 1977, closed in 1987 and demolished.</p>
1888	Lever Brothers, Port Sunlight factory and village	Port Sunlight, Wirral, near Liverpool, UK	<p>Small park, tennis courts and bowling green in Port Sunlight. Football pitch.</p> <p>Allotments behind houses.</p> <p>120-acre sports ground opened in 1919 outside the village at Bebington.</p>
1880s	Pullman factory and town	Illinois, USA	<p>Factory overlooked lake and landscaped park.</p> <p>Arcade Park in town centre.</p> <p>Sports ground on Calumet Island.</p> <p>Gardens were neglected by 1905 according to Meakin, <i>Model Factories</i>, p. 387.</p>
1881	Rowntree Chocolate	York, UK	Rose garden and Girls' Garden adjacent to factory.

	factory		<p>Tennis courts and bowling green adjacent to factory.</p> <p>Hanging baskets in factory.</p> <p>Boys' and Men's allotments.</p> <p>Sports grounds at factory.</p> <p>Octagonal conservatory in factory grounds.</p>
From 1895	National Cash Register Co. (NCR)	Dayton, Ohio, USA	<p>From 1895, factory and surroundings landscaped by the Olmsted Brothers.</p> <p>1897 Boys' Gardens opened (and later, the Girls' Gardens and the Officer's Club Gardens).</p> <p>From 1904 Olmsted Brothers made improvements to the recreation grounds and grounds around women's club.</p> <p>From 1905, Hills and Dales Park.</p> <p>1907 Olmsted Brothers made the 'English Garden' outside the offices. In 1911, land used for new convention centre.</p> <p>From 1937 Old River Park. Only the lagoon remains.</p>
After 1895	Natural Food Company (renamed	Niagara Falls, Buffalo Avenue, NY,	<p>Factory overlooked the Falls.</p> <p>Grounds surrounding the factory designed by Olmsted Brothers, including</p>

	Shredded Wheat from 1913)	USA	a children's playground open to all. Boys' Gardens. Roof garden and viewing deck.
1900	The Boots Company	Nottingham, UK	Lady Bay Recreation ground opened 1900. Recreation ground outside D31 building on the Beeston site. (Day continuation school, gymnasium and canteen, opened 1939). Lawns outside the building used for company celebrations, e.g. the Gala Day.
1925	Shredded Wheat	Welwyn Garden City, Herts. UK	Planting around factory buildings. Sports grounds adjacent to factory.
1905	John Player	Nottingham, UK	33-acre recreation ground opened in Aspley Road in 1905.
From 1909	Spirella Corset Co.	Meadville, Pennsylvania, USA	Company helped to maintain Athletic Park in Meadville. (The town was known for its parks and gardens.) Moved to Niagara Falls 1912-17.
1908	Spirella Corset Co.	Niagara Falls, Ontario, Canada	300 ft. frontage on the gorge of the Niagara River. Flowers and shrubs around the building. (Building became the Niagara Falls Museum in 1958 and is now the Niagara Falls Aviary.)
From 1912	Spirella Corset Co.	Niagara Falls, NY, USA	Outdoor recreation facilities. The President, W. W. Kincaid, established a model farm near Youngstown.

1912 – 1920s	Spirella Corset Co.	Letchworth Garden City UK	<p>Formal gardens outside factory and offices with pond and fountain.</p> <p>Roof garden.</p> <p>Sports ground.</p>
From 1919	Ovaltine	Kings Langley, Herts, UK	<p>Formal pleasure gardens with tennis, croquet and bowling.</p> <p>Model farms established 1929. Dairy farm design based on Marie Antoinette’s ‘hameau’ at Versailles.</p> <p>1930s aerial photograph shows a small classical rotunda pavilion in the gardens.</p>
<i>c.</i> 1926	Raleigh Cycles	Nottingham, UK	Recreation ground opened at Woolaton.
From 1932	Bata factory and village	East Tilbury, Essex, UK	<p>Gardens outside factory and offices laid to lawn with trees, shrubs and flowers and with seating. Cherry trees featured prominently.</p> <p>Recreation grounds with pavilion opposite the factory.</p> <p>Tennis courts, swimming pool and children’s playground (opened 1937) in village</p>

APPENDIX 2: FACTORIES WITH GARDENS AND PARKS c.1800 - c.1950

- The following sites have been identified during the course of research, but not visited.
- The list is not comprehensive and it focuses on examples in the UK and USA.
- Emboldened entries are mentioned, discussed or illustrated in the thesis.
- Selective sources have been given.
- Dates given are the building of the factory, the start of production, or the dates of the landscaping where known. Some dates are approximate.
- Abbreviations: Meakin's *Model Factories and Villages* to 'Meakin'; Beveridge, *Master List* to 'Beveridge' and Gilman's *A Dividend to Labor* to 'Gilman'

Date	Company	Location	Details	Source of information
1811	Lowell Mills and Village	Lowell, MA	Village landscaped with wide verges and tree-lined roads. Flowers in factory.	Coolidge, <i>Mill and Mansion</i>
1847	Copley and Ackroydon (1859), mills and villages	Halifax, Yorks.	Copley was first factory village in UK according to Pevsner. Predates Saltaire, begun in 1851. Allotments.	Pevsner, <i>History of Building Types</i> , 279 Darley, <i>Villages of Vision</i> , 133-136
c.1850	Turton Mills	Bolton, Lancs.	Fruit trees trained against the wall of the mill.	Cooke Taylor in Ward, <i>The Factory System</i> , 63
After 1850	Familistère de Guise	Guise, France	Residential complexes near the Guise foundry that included a recreational garden.	Familistère de Guise: http://www.familistere.com/site/english/visiting_familistere/guided_tours.php
1853	Thomas Mason & Sons	Ashton-under-Lyne, Lancs.	From 1870s (?) - sports ground, children's playground.	Tameside: http://www.tameside.gov.uk/ashton/history Gilman, 191

1853	Price's Patent Candle Company	Bromborough Pool, Liverpool	Garden village built by Price's, included sports ground.	de Soissons, <i>Welwyn Garden City</i>
1854	Waltham Watch Co.	Waltham, MA	'One of the most beautifully situated examples of modern factories... surrounded by well-kept lawns'. Two small parks opposite the factory and another 'at a distance'.	Meakin, 71 Gilman, 206-8
From 1850s	Great Western Railway and Village	Swindon, Wilts.	Park in village	Gilman, 203
1860s	Cheny Brothers Industrial village	South Manchester, CT	Six brothers lived around the mills in grounds 'laid out like a park' with groups of cottages beyond. Keeping of cows and hens not allowed, to encourage vegetable growing.	Stilgoe, <i>Borderland</i> , 252
1871-2	Menier Chocolate Factory and village	Noisiel sur Marne, France	Park in village adjacent to the factory. Houses with gardens.	Garner, <i>Company Town</i> , 48-68
From 1871	Krupp	Essen, Germany	Workers' housing had gardens and two of the four workers' colonies had 'extensive parks. In 1890 a recreation centre built for office staff surrounded by a large garden. Similar facilities for factory workers from 1894.	Ryan, 'Krupp' McCreary, 'Social Welfare'

1880-84	Boston and Albany Railroad (Stations)	MA	New suburban public transport system that included landscaping of stations designed by F.L. Olmsted and Olmsted, Olmsted and Eliot.	Beveridge, 265 Mulford Robinson, <i>Modern Civic Art</i> , 74 (photograph)
1883	North Easton Railway Station	North Easton, MA	Landscaping of railway station (H.H. Richardson) by Olmsted firm.	Beveridge, 265
1880s	Morris & Co.	Merton Abbey, Surrey	Gardens outside workshops.	Morris, <i>A Factory</i>
1886	N.O. Nelson LeClaire factory and town	Illinois, USA	'Model' community with green space and good recreational facilities including playgrounds and sports grounds. Company hothouses and boys' gardens.	Biggs, <i>Rational Factory</i> , 65-6 Meakin, 246, 284
1887	Horlick	Racine, WI	Postcards suggest that the factory was situated in a landscaped park. Athletic club.	Wisconsin genealogy: http://www.wisconsin-genealogy.net/racine/horlick-malted-milk-company.htm
1890-1950	Endicott Johnson	Binghamton, Johnson City and Endicott, NY	Communities had parks, playgrounds and sports facilities.	Zahavi, <i>Workers, Managers</i>
c.1890	C.J. Clark	Street, Somerset	Factory situated in attractive surroundings. Allotments.	Sutton, <i>A History</i> , 73, 158-9 Meakin, 68

1890s	Witin Engineering Company	Whitinsville, MA	'beautiful and healthful environment'	Soltow and Gravelle, <i>Worker Benefits</i> , p. 78
1899	Illinois Steel Works	Joliet, IL	Flowerbeds, tennis and croquet outside employees' 'Atheneum' Club.	Meakin, 224 Gilman, 213
1899	United Shoe Machinery Company	Beverly, MA	Factory with advanced welfare programme. 300 acres of land crossed by the Charles River.	Beverly Historical Society: http://www.beverlyhistory.org/ ; Tarbell, <i>New Ideals</i>, 38
c.1900	Acme White Lead and Colour Co.	Detroit, MI	Landscaped with shrubs. Climbing plants grown on trellis inside from pots on brackets.	Meakin, 75 Mulford Robinson, <i>Modern Civic Art</i> , 253 fn 1
c.1900	Brunner, Mond & Co.	Northwich, Cheshire	Athletic ground and 'fine' pavilion in former country estate.	Meakin, 217
c.1900	Burroughs and Wellcome	Dartford, Kent	Company had taken over a mansion and grounds, 'practically a park' as an employee club. A river through the grounds provided boating and swimming.	Meakin, 219-220
c.1900	Chivers Jam Factory	Histon, Cambs.	Factory situated in fruit fields: 'The Orchard Factory'	Meakin, 68-69 (with photograph)
c.1900	Clements Manufacturing Co.	Northampton, MA	Flowering vines cover sheds.	Meakin, 73 (photograph)

c.1900	Cleveland Cliffs Iron Co.	Cleveland, OH	Creeper-clad; gardening prizes to employees with plants supplied at reduced prices.	Meakin, 78 (with photograph) Gilman, 221
c.1900	Cleveland Varnish Co.	Cleveland, OH	'...has beautified the grounds around its factory.'	Meakin, 75
c.1900	J. and J. Coleman	Carrow, near Norwich, Norfolk	Formal gardens outside the administrative offices. A photograph in Meakin suggests that the factory also had a rest or pleasure garden for employees – 'a shady nook for the dinner hour'.	ILA 'Industrial Gardens', 231 (photograph) Meakin, 222 (photograph)
c. 1900	Crane Paper Mills	Pittsfield, MA	'...overlooking a river and "a rural scene of park-like style, unspoiled by fences..."	Meakin, 71
c.1900	Eastman Kodak	Harrow, Middx. (opened 1896)	Landscaping and recreation grounds.	The late Frank Davies, Chairman of the King's Langley Local History and Museum Society, whose father worked for Kodak.
c. 1900	Eastman Kodak	Rochester, NY	Factory situated in Kodak Park Also had a wartime garden in the First World War. Recreation ground.	NCR.DH.fl Price, <i>Modern Factory</i> , 328 (photograph)
c.1900	Ferris Corsets	Newark, NJ, USA	Creeper-clad factory.	Meakin, 103
c.1900	Goodyear Tyre Co.		Large sports grounds and children's playground. Gardens (no further detail).	<i>The Goodyear Tire and Rubber Co.</i> Boettiger, <i>Employee Welfare</i> , 196-7

c. 1900	J.G. Graves	Sheffield, Yorks	Roof garden.	Meakin, 96
c.1900	Hartley	Aintree, Liverpool	Employee institute with 'ample' bowling green and pavilion.	Meakin, 228
c.1900	Hazell, Watson and Viney	Aylesbury, Bucks.	Factory was 'creeper-clad'. Six-acre recreation ground Employee allotments	Meakin, 69-70, 222 Gilman, 185
c. 1900	Heinz Co.	Pittsburgh, PA	Roof gardens for men and women. Pot plants and creepers and a tower with a music room and organ for dances.	Meakin, 94, 96
c. 1900	Jacobs & Sons	Dublin, ROI	Roof garden.	Meakin, 95 (photograph)
c.1900	Parke-Davis Drug Co.	Detroit, MI	Factory guides wore carnations in button-holes supplied from the directors' hothouses.	Meakin, 113
c.1900	Plymouth Cordage Co.	Plymouth, MA	Factory surrounded with lawns and shrubs and walls planted with creepers.	Meakin, 78-80
c. 1900	Postum Cereal Co.	Battle Creek, MI	According to a slide in the NCR lantern slide collection, the offices were attractively landscaped.	NCR.DH.fl
c.1900	U.S. Playing Card Co.	Cincinnati, OH	Courtyards surrounding the factory planted with flower beds. Reservoir for swimming and skating.	Meakin, 75, 223

c.1900	Warner Brothers Corsets	Bridgeport, CT	Employees institute beside park.	Meakin, 224
c.1900	Westinghouse Electric Company	Pittsburgh, PA Chester, PA	‘industrial regard for civic aesthetics’ Company town with ‘numerous open squares and playgrounds’ and a central recreation ground.	Mulford Robinson, <i>Modern Civic Art</i> , 253 fn 1 Comstock, <i>Housing Book</i> , 37
c.1900	Weston Electrical Instrument Co.	Newark, NJ.	Set in an estate of 27 acres surrounded by woods and lawns.	Meakin, 85
c.1900	Willimantic Thread Co.	Willimantic, CT	Climbers, geraniums, petunias and flowering shrubs on piers on factory floor.	Meakin, 100
1901-02 (landscape)	Solvay Process Co., factory and village	Syracuse, NY	Plans for park provided by Olmsted Brothers. ‘5-acre plot’ next to the factory, that included a ‘model athletic field’ with tennis courts, running track and baseball grounds. At some distance from the factory, a park with guild house and guild hall for workers and club house for office workers.	Beveridge, 272 FLO.NHS and LC.MD.OAR Job# 00077 Tolman, <i>Social Engineering</i>, 317, 328-30
1903- 1928	Cream of Wheat Co.	Minneapolis, MN	Factory resembled a conservatory and had an Italian garden and roof garden.	Hunter Bradley, <i>The Works</i> , 207

From 1903	Hershey Chocolate factory and town	Hershey, PA	Factory and town with park. Approach to factory landscaped and factory covered in ivy.	Snavely, <i>Hershey</i> , 67
1904	Larkin Soap Company Administration Building	Buffalo, NY	Designed by Frank Lloyd Wright. Rooftop conservatories and terraces for employees and guests. Waterfall features at entrances to building.	Quinan, <i>Frank Lloyd Wright's Larkin Building</i>, 108, 150, 157
1905 and 1929-1945 (landscape plans)	Western Electric Hawthorne Works	Chicago, IL	Landscaped by Olmsted Brothers. Grounds included a greenhouse. (Western Electric became one of the forerunners in applying scientific management to its production units.)	Beveridge, 266-7 FLO.NHS and LC.MD.OAR Job #09198
Before 1909	Gorham Co.	RI?	'attractive surroundings' including 'a pond, woods, slopes, ravines, rocks and foliage, winding roadways and paths, lawn' and beautiful trees - 'the appearance of a park'.	Tolman, <i>Social Engineering</i> , 328
Before 1909	L.O. Koven & Brothers	Jersey City, NJ	Grounds for employees adjoining the main factory building. Seats under trees and ground for games.	Tolman, <i>Social Engineering</i> , 316
Before 1909	Steel Mill	Pueblo, CO	Baseball ground, tennis courts.	Tolman, <i>Social Engineering</i> , 316

1909-13 (landscape plans)	Thomas G. Plant Shoe Factory	Roxbury (now Jamaica Plain), MA	Park adjacent to the factory designed by F.L. Olmsted, Jr.	Beveridge, 269 FLO.NHS and LC.MD.OAR Job #03792
1911	Ludlow Mnfng. Association	Ludlow, MA	Employee clubhouse and recreation ground.	Biggs, <i>Rational Factory</i>, 66
1911 (landscape plan)	White Enamel Refrigerator Co.	St. Paul, Minneapolis, MN	'Proposed treatment for Factory grounds' – plan by Morell and Nichols, Landscape architects. Not known if this was completed.	Morell and Nichols <i>Landscape Architecture</i>
?	The Iron Clad factory	Brooklyn, NY	Dining room with many windows, each one with window box and ceiling covered with grape vines.	Biggs, <i>Rational Factory</i> , 68
1907 (landscape plans)	Cuticura Soap Factory	Malden, MA	Landscape plans by Olmsted Brothers.	Beveridge, 269 FLO.NHS and LC.MD.OAR Job#03320
1907 - 1910	Reckitt & Sons, factory and garden village	Hull, East Yorkshire	From 1907, factory had sixteen-acre recreation ground, designed by Runton & Barry who retained trees on site. (They also designed the village.) Later the grounds were greatly enlarged.	Garden Village Society : http://mysite.wanadoo-members.co.uk/shelagh_houlton/GardenVillage.htm
1910-13 (landscape plans)	Eastern Michigan Edison Co.	Rochester, MI	Landscape plans by Olmsted Brothers.	Beveridge, 271 FLO.NHS and LC.MD.OAR Job#05069

c. 1911	Country Gentleman's Association, distribution centre	Letchworth Garden City, Herts.	Neo-Elizabethan building with huge garden.	Photographs in archive of FGCHM.
1911-24 (landscape plans)	Detroit Edison/Delray Plant	Detroit, MI	Landscape plans by Olmsted Brothers.	Beveridge, 271 FLO.NHS and LC.MD.OAR Job#03617
1911-14 (landscape plans)	Barton Power Plant/Detroit Edison Co.	Barton, MI	Landscape plans by Olmsted Brothers.	Beveridge, 271 FLO.NHS and LC.MD.OAR Job#03618
1912-1925	US Steel Corporation (founded 1901)	Headquarters in Pittsburgh, PA	Spent over \$158 million on welfare programmes to provide playgrounds, schools, clubs, gardens, safety features accident relief payments and pensions.	Biggs, L. <i>Rational Factory</i> , 96
1913 (landscape plans)	Chase Rolling Mill Co.	Waterbury, CT	Landscape plans by Olmsted Brothers.	Beveridge, 267 FLO.NHS and LC.MD.OAR Job #05873
1913-19 (landscape plans)	New York Air Brake Co.	Watertown, NY	Landscape plans by Olmsted Brothers.	Beveridge, 272 FLO.NHS and LC.MD.OAR Job #05920
Before 1914	Bayer Chemical Company	Leverkusen, Germany	'very beautifully located'	Price, <i>Modern Factory</i> , 59, 327
Before 1914	Boden's Net Factory	Derby, Derbys.	Windows look out on courtyards containing well-kept gardens and a gymnasium, 'the former of which would have done credit to	Price, <i>Modern Factory</i> , 59

			a nobleman's chateau, so neat and well kept were their flower borders.' Cricket ground and two bowling greens.	Meakin, 221
Before 1914	General Electric Light Co.	Schenectady, NY	Main entrance decorated with tubs of flowers and Boston Ivy planted around the principle buildings near the entrance.	Price, <i>Modern Factory</i>, 58
Before 1914	Hammerbrot works (socialist co-operative bakery)	Near Vienna, Austria	'with beautiful surroundings'	Price, <i>Modern Factory</i> , 59
Before 1914	International Harvester Co., McCormick and Deering Works	Milwaukee, WI	'Playground' outside factory with bandstand, lawns, tennis, baseball.	Wisconsin Historical Society: www.wisconsinhistory.org (photographs) Boettiger, <i>Employee Welfare</i>, 196-7
Before 1914	Karl Zeiss Works	Jena, Germany	Football grounds. Price remarked that the company has only a football club and a singing society so that the workers could mingle in the social life of the town and develop their own pleasures according to their individual tastes.	Price, <i>Modern Factory</i> , 327

1914 and 1930-61 (landscape plans)	American Optical Co.	Southbridge, MA	Landscape plans by Olmsted Brothers.	Beveridge, 269 FLO.NHS and LC.MD.OAR Job #06007
After 1914	W. & R. Jacob and Co. Ltd	Aintree, Liverpool	Large portion of factory area laid out in gardens. Canteen doors opened up to rose gardens with seats. Bowling green, tennis courts and recreation park. Roof garden.	<i>Industrial Welfare</i> (March 1928), 78-81 (includes photograph) UW.MRC
1916-1937 (landscape plans)	Youngstown Sheet and Tube Co.	Youngstown, OH	Landscape plans by Olmsted Brothers.	Beveridge, 272 FLO.NHS and LC.MD.OAR Job #06367
1917	Galloway Engineering Co. (Munitions)	Kirkcudbright, Scotland	Roof garden with a tennis court. The company publicised itself on its wonderful environment.	Clarsen, 'Fine University', 333-55
1917-1927 (landscape plans)	Torrington Mfg. Co.	Torrington, CT	Landscape plans by Olmsted Brothers.	Beveridge, 267 FLO.NHS and LC.MD.OAR Job #06535
1918-1920; 1935 (landscape plans)	Hammermill Paper Co.	Erie, PA	Landscape plans by Olmsted Brothers.	Beveridge, 273 FLO.NHS and LC.MD.OAR Job #06632
Before 1919	Phoenix Dynamo Manufacturing Co.	Bradford, Yorks.	Welfare organization founded and financed by employees. Leased 70 acres of grounds for sport and golf 'and substantial	<i>Industrial Welfare</i> (Oct.1919), 190 (photograph) UW.MRC

			portions for poultry and allotments'. Bandstand for Sunday evening concerts.	
1919-1921 (landscape plans)	Chase Companies Inc. and North Main Street Project	Waterbury, CT	Landscape plans by Olmsted Brothers	Beveridge, 267 FLO.NHS and LC.MD.OAR Job#06671 and #07009
1919-1921 (landscape plans)	Fort Pitt – Malleable Iron Co.	Pittsburgh, PA	Landscape plans by Olmsted Brothers	Beveridge, 273 FLO.NHS and LC.MD.OAR Job #06764
1920	Fairfield Shipbuilding and Engineering Co.	Govan, Scotland	Proposed layout of recreation ground designed by Commander Coote of the Industrial Welfare Society. Included: model boat pond, sand pit and children's playground surrounded by a cement track for 'Hoops, Scooters and Roller Skates'. For adults: bowling greens, clock golf, quoit rinks, miniature golf, fives courts, tennis, badminton, hockey, cricket, football, pavilion and groundsman's house and garden.	<i>Industrial Welfare (Feb 1921), 63 (plan) UW.MRC</i>

1921-22 (landscape plans)	Attleboro Springs Co.	Attleboro, MA	Landscape plans by Olmsted Brothers.	Beveridge, 268 LC.MD.OAR Job#06992
c.1920	Messrs. E. & A. Robinson	Bedminster and Bristol, Avon	Both factories had roof gardens. At Bedminster, men played cricket on the roof and women played basketball.	<i>Industrial Welfare</i> (July 1921), 295 UW.MRC
c.1920	Municipal Waterworks	Letchworth Garden City, Herts.	Surrounded by gardens.	FGCHM - photographs
1920s	Barlow and Jones	Bolton, Lancs.	30-acre recreation ground 'most attractively laid out', includes terraced walks and pavilion.	<i>Industrial Welfare</i> (September 1927), 308-9 UW.MRC
1920s	Birmingham Gas Dept.	Birmingham, West Midlands	20-acre recreation ground. 'Picturesque' landscaping of perimeter of grounds and bowling greens with belts of trees and shrubs.	<i>Industrial Welfare</i> (September 1927), 309-10 UW.MRC
1920s	J. & P. Coats and Clark & Co.	Paisley, Renfrewshire, Scotland	Landscaped factories.	<i>Industrial Welfare and Personnel Management</i> (June 1931), xi (advertisement) UW.MRC
1920s	Condé Nast Publications, printing works	Greenwich, CT	Works situated in a landscaped estate. Photographs shows a pond and fountain, overlooked by a temple and a sphinx on a plinth.	<i>Industrial Welfare and Personnel Management</i> (March 1930), 89 (photographs) UW.MRC
1920s	Dunlop Rubber Co.	Birmingham, West Midlands	Sports ground and substantial pavilion.	<i>Industrial Welfare</i> (August 1925), 293 UW.MRC

1920s	Huntley and Palmer	Reading, Berks.	<p>Small canal-side garden beside the employees' social club.</p> <p>Fourteen-acre recreation ground.</p>	<p>BBC: http://www.bbc.co.uk/legacies/work/england/berkshire/user_1_article_1.shtml</p> <p>Meakin, 222</p>
1920s	Oxo	Bromley, Kent	<p>21-acre recreation ground. Recreation facilities included a cottage hut for weekend camping during summer with space for eight girls (at Bromley).</p>	<i>Industrial Welfare</i> (May 1925), 182-3
1920s	Joseph Pickering & Sons Ltd	Sheffield, Yorks.	<p>Firm employs 300, mostly women.</p> <p>Roof garden surrounded by concrete parapet and railings. Games there include roller skating and cricket. In August 1925 there was a dance on the roof garden lit by fairy lights and Chinese lanterns and decorated with bunting and streamers. 400 dancers.</p>	<i>Industrial Welfare</i> (September 1925), 328 UW.MRC
1920s	Tootal Broadhurst Lee Co.	Radcliffe, Lancs.	<p>At Works A: 'An area has been laid out as a garden used during summer months for putting etc in the dinner hour. There is also a greenhouse which supplies</p>	<i>Industrial Welfare</i> (June 1924), 158-160 UW.MRC

			plants 'for internal decoration'. The mills are decorated 'in colours' and where possible plants and hanging baskets are introduced. At Works C: a garden with tennis courts and planted with trees, flowering beds etc.	
1920s/30s	Bata, factory and Town	Zlin, Czechoslovakia	'A Factory in a Garden'	Pavitt, 'The Bata Project', 33-44
1920s/30s	Bowaters	Kemsley, Kent	Factory village.	Darley, <i>Villages of Vision</i> , 259
1920s/30s	Crittall, factory and village	Silver End, Essex	Village with playing field in the centre.	Crittall, 'Silver End'
1920s/30s	T.W. Lench Ltd	Blackheath near Birmingham, West Midlands	Gardens made from disused slag heap.	<i>Industrial Welfare and Personnel Management</i> (April 1930), 121 UW.MRC
1920s/30s	London Brick Company	Stewartby, Beds.	Factory village.	Darley, <i>Villages of Vision</i> , 259
1922-1923 (landscape plans)	Sawyer, Regan Company Mill	Dalton, MA	Landscape plans by Olmsted Brothers.	Beveridge, 268 FLO.NHS and LC.MD.OAR Job#07102
1923 - 1935	Fry, Somerdale Chocolate Factory	Somerton, near Bristol, Avon	Merged with Cadbury in 1919. Grounds designed by Cheals of Crawley.	Benton, <i>Cheals</i> , 207
1925 (landscape plans)	Kohler factory and village (built from 1913)	Kohler, WI	Landscaping designed by the Olmsted Brothers who also designed the village.	Beveridge, 273 FLO.NHS and LC.MD.OAR Job #07392 Klaus, <i>Modern Arcadia</i>, 155

			In 1918 built American Club to provide accommodation and recreation facilities for mainly immigrant workforce.	
1926-1936 (landscape plans)	Community Plate Co./Oneida Community	Oneida, NY	Landscape plans by Olmsted Brothers.	Beveridge, 272 FLO.NHS and LC.MD.OAR Job#07728
1927	Joseph Lucas	Birmingham, West Midlands	Roof garden. Moor Park Recreation ground opened 1927, with bandstand	<i>Industrial Welfare</i> (December 1927), 391 (photograph) UW.MRC
1928	Carreras Tobacco	'Arcadia Works' Mornington Crescent, London and Marsh Lane, Stanmore, London	The Stanmore factory had a large recreation ground and gardens. Elaborate plan by Stanley Hart.	Adams, <i>Playparks</i> (photograph)
1928-1934; 1939 (landscape plans)	Western Electric Point Breeze	Baltimore, MD	Landscaping by Olmsted Brothers	Beveridge, 271 FLO.NHS and LC.MD.OAR Job #09035
1929 (landscape plans)	United Electric Light Co.	West Springfield, MA	Landscape plans by Olmsted Brothers	Beveridge, 269 FLO.NHS and LC.MD.OAR Job #09116
c.1930	Sanderson	Perivale, London	Surrounding meadows laid out as a playing field. Flower	<i>Industrial Welfare and Personnel Management</i> (April 1933), 18-20 (including

			borders and seating around bowling green.	photograph) UW.MRC
1930s	Aladdin Industries	Hemel Hempstead, Herts.	Formal gardens to front and sides of building designed by Ian G. Walker, Landscape Architect.	ILA (Winter 1934), 48-9 (photographs)
1930s	Messrs C. & T. Harris	Calne, Wilts.	The company bought a country estate and used the grounds for recreation. The club there became a centre for industrial recreation in Calne.	<i>Industrial Welfare and Personnel Management</i> (April 1936), 33-4
1930s	De Havilland Aircraft	Hatfield, Herts.	Formal garden with lawns, pond, roses, shrubs and trees designed by Richard Sudell.	ILA (Winter 1936), 230-233 (photograph)
1930s	London Film Studios	Denham, Bucks	Formal gardens outside modernist buildings.	ILA (Winter 1936), 230-233 (photographs)
1930s	Miners' Welfare Committee (MWC)	Backworth, Tyne and Wear	One of many parks made for miners and their families promoted by the MWC. Adams remarks on the good quality of design and amenity at this park.	Adams, <i>Playparks</i>
1930-1; 1938 (landscape plans)	A.O. Smith Corporation	Milwaukee, WI	Landscape plans by Olmsted Brothers	Beveridge, 273 FLO.NHS and LC.MD.OAR Job #09250
From 1932	Hoover	Perivale, London	Designed by Wallis, Gilbert & Partners. Front of factory was landscaped with lawns and	Bucknell, <i>Industrial Architecture</i>, 111 (photograph)

			bedding plants in a ‘sunburst’ pattern.	
From 1936	Glaxo Laboratories	Greenford, Middsex	Gardens designed by Cheals Nurseries of Crawley	Benton, <i>Cheals</i>
From 1938	Montague Burton (‘Burtonville’)	Worsley, Lancs.	Factory (designed by Thomas Wallis) attractively landscaped. More than half the site laid out for sports.	Skinner, <i>Form and Fancy</i>, 214-222
From 1938	Wedgwood factory and village	Barlaston, Staffs.	Park-like situation. Recreation grounds.	Gater and Vincent, <i>Factory</i>
1940 (landscape plans)	Bell Telephone Co. (Laboratories)	Summit, NJ.	Landscape plans by Olmsted Brothers	Beveridge, 270-1 (illustration) FLO.NHS and LC.MD.OAR Job #9218
1940s	Kellett, Woodman & Co.	Bradford, Yorks.	‘Garden with lawn, flower garden and rose garden. An air raid shelter has been converted into a cinema.’	<i>Industrial Welfare and Personnel Management</i> (Jan/Feb 1947), 31
1940s	Creamola Food Products	Glasgow, Scotland	Roof garden provided with chairs and magazines etc.	<i>Industrial Welfare and Personnel Management</i> (May/June 1946), 113
After 1945	Paynes Chocolate factory	Croydon, Surrey	Gardens designed by Cheals Nurseries of Crawley.	Benton, <i>Cheals</i>
After 1945	W.S.Shutterworth & Co. (Chocolate Manufacturers)	Bermondsey, London	The company planned a more attractive setting for their workers (a high proportion were female) after the War and employed three full- time gardeners. Flowers from the	<i>Industrial Welfare and Personnel Management</i> (May/June 1954), 80

			<p>company greenhouses decorated the interiors.</p> <p>A small garden, park and playground opposite the factory. The council supplied playground equipment and mothers could leave their children there when they went shopping.</p> <p>The grounds were opened three times a year to the general public. The scheme attracted much comment in the local press and other factories in the area followed suit.</p>	
1950s	Enfield Cables Ltd.	Brimmsdown, Middlesex	Pleasure gardens at factory canteen with formal flowerbeds and informal lawns planted with trees and shrubs. Tennis courts and sports ground. Car park landscaped with trees and shrubs.	Verulam and Youngman, <i>Factory Gardens</i> (plan)
1950s	Fluidrive Engineering Co. Ltd.	Bracknell, Berks	Factory surroundings planted with trees, shrubs and lawns. Landscape Architect: S. H. Haywood.	Verulam and Youngman, <i>Factory Gardens</i> (plan)
1950s	Tar and Ammonia Products Works	Beckton, London	Factory buildings landscaped with lawns and flowerbeds.	Verulam and Youngman, <i>Factory Gardens</i> , (photograph)

BIBLIOGRAPHY

1.0 ARCHIVAL SOURCES

1.1 ART INSTITUTE OF CHICAGO, BURNHAM LIBRARY

'Original Town of Pullman, 1903' and 'Plan of sewers, gas mains, water pipes, 1886' from Carlson, G. N. *Atlas of the Town of Pullman*. Microfilm roll no. 39. The Town of Pullman Illinois

1.2 BATA REMINISCENCE & RESOURCE CENTRE, EAST TILBURY (BRRC)

1.2.1 *Bata Record* (listed chronologically)

'Whit Monday Sports' 1 (25 May 1934), p.1

'Social Fixtures' 2 (1 June 1934), p.3

'Open air dances' 5 (22 June 1934), p.4

'There is no room for apathy' 8 (6 July 1934), p.3

'Gliding will be the next sports activity' 15 (7 September 1934), p.1

'Gardens of Bata Avenue' 16 (14 September 1934), p.5

'Playtime' 101 (15 May 1936), p.1

'Making a 'Garden City' 113 (21 August 1936), p. 5

'Guineas for Gardens' 156 (11 June 1937), p.1

'This is the firm they want to run for us' 169 (9 September 1937), p. 2

'20th Century Factory Town' 175 (22 October 1937), p. 2

1.2.2. Other

'East Tilbury. 70 Years of a Unique Community' CD Edition 1 (2004)

1.3 BODLEIAN LIBRARY, OXFORD

1.3.1 Manuscripts

Cadbury *Souvenir of Bournville* (Bournville, c. 1900) G.A. Worc. 8° 72 (1)

1.3.2 John Johnson Collection, an archive of printed ephemera

Cadbury Brothers *The Bournville Bunny* (c.1920?) Cocoa, Chocolate and Confectionery 1 (49)

Cadbury Brothers *British Tree Species* Advertisements (reward cards): (c. 1911?) Cocoa, Chocolate and Confectionery 1 (51)

Cadbury Brothers *The Factory in a Garden* (Bournville, c.1930) Johnson e. 5402

Cadbury Brothers *A Visit to Bournville* (c.1920?) Cocoa, Chocolate and Confectionery 1 (50a)

Chivers & Sons Ltd. *Chivers and Sons. The Orchard Factory, Histon, Cambridge, England* (1920s) Food 6 (73)

1.4 BOOTS COMPANY ARCHIVE, NOTTINGHAM (BC)

1.4.1 Unpublished sources

- 'Employee Statistics 1893-1965'
- 'Notes on D31 building'
- 'Notes on the Lady Bay Sports Ground'

1.4.2 Published sources

- 'Beeston...the largest factory of its kind in Gt. Britain.' Promotional leaflet A85/7
- 'School Notes – the New School' *The Beacon* (February 1939) pp. 28-9

1.5 BORTHWICK INSTITUTE FOR ARCHIVES, UNIVERSITY OF YORK, ROWNTREE ARCHIVE (BI.RC)

(See Burg, J. *A Guide to the Rowntree and Mackintosh Company Archives 1862-1969*)

1.5.1 Unpublished sources

- '1926 American tour of CH Northcott, Labour Manager and Hawkesby Chief Shop Steward'. R/DH/CP/7
- 'The Cocoa Works, York', plan of works showing rose garden and bowling green (no date). R/DT/EB/10
- Correspondence and reports relating to provision of sports pavilion and recreational facilities for employees with reports from other firms 1945, including sketch plan of Raleigh sports grounds and gardens (no date). R/DL/DunDunollie/1-2
- Estimates by estate department including some plans of sports grounds, lawns etc. 1904-1927. R/DT/ES/3
- Guard Books of designs for lids for fancy boxes etc. HIR/9/8-14
- Land and building details 1897-1954. R/DF/AA/23

1.5.2 Published sources

- Cocoa Works Magazine (CWM)* (Quarterly, then monthly, 1906-1939) including 'The Tropical Plant House' (March 1923), p. 179; 'The Girl's Dancing Class' (June 1923), p. 202; 'Watching American Methods' (September 1923), pp. 215-6 and 'Showing the Visitors Round. How it is done in U.S.A.' (September 1923), p. 230
- Guard Books of designs for lids and wrappers of boxes. HIR/9/8-14
- Ordnance Survey maps 1909, 1911, 1931. R/DT/ES/4
- Souvenir booklets for visits to Works 1904-1955. R/DD/SP/9-14, 17

1.6 CADBURY ARCHIVE, BOURNVILLE (CB)

1.6.1 Manuscripts

- 'Committee of Management Minute Book 2 1900-01'. C301
- 'Men's Recreation Ground Minute Book 1897-1906'. 350 001804
- 'Minute book Indenture', no date. 350 001804

'Personal Reminiscences'. 000 003270

'Visit of the Press to Bournville, September 24 1906'. 024 003225

'Women's Recreation Ground Minute Book 1897-1906'. 351 004922

1.6.2 Plans

Cadbury Engineers' Office Drawing of Girls' Grounds (1911). Cadbury drawing no: 3574EAT

J. Cheal & Sons, Garden Architects 'Cadbury Brothers Ltd, Bournville, alterations to Girls' Recreation Ground' – series of drawings, March – April 1910. Cheals Job No. 32. Cadbury drawing nos. 3233-8

Cheals of Crawley (Garden Architects) Plan. 'Cadbury Bros Bournville Girls' Recreation Ground Plan and Details of Proposed Alterations to Stables etc., no date 'Rowheath Farm Estate, Bournville Recreation Ground. Layout as Proposed by J. Cheal & Sons Ltd' (20 January 1921). Cheal drawing no.11725

Plan for Rowheath Park, 27 May 1924

Plan 'Garden Club Rowheath Estate' Cadbury Brothers Engineers Office (27 May 1924)

1.6.3 Souvenir and other guides

Bournville: a Review (1921), 020 002757

The Bournville Village Trust (1901) (1906) (1926), 001364 830

Bournville Village Trust 1900-1955, 830 001449

The Bournville Village Trust. An Account of Its Planning and Housing Schemes in Suburban and Rural Areas (1939), 830 001510

Bournville at Work and Play (1926), 020 002765

Bournville Personalities (1938), 020 001959

Bournville Works and its Institutions. A Concise account of the Educational, Recreational, Pensions and Other Schemes (1936), 350 002151

The Factory in a Garden (six souvenir guides printed between c.1900 and c.1955), 000 000026

The Factory and Recreation. The Recreational and Social Institutions at Bournville Works (1925), 350 002111

Thirty Years of Progress. Review of the Growth of Bournville Works (1909), 020 002693

1.6.4. Other printed material

'Cadbury's factory in a garden at Moreton'. 030 000041

Harrison, C.A. 'Camps and Tours for Industrial Workers at Bournville' (1920s). 366 002128

'Information for the use of Guides and Visitors' (1926). 024 000032

'Instructions to Forewomen at Cadbury, July 1922'. 330 02226

Lantern Lecture Bureau 'The Bournville Lantern Slide Lectures' insert in *The Factory in a Garden* (c.1932). 000 000026

'Official Programme Bournville Works Exhibition and Musical Festival, 10-13 June 1925, Girls' Recreation Ground, Bournville'. 350 002135

Programmes of Bournville annual summer party. 350 002134

'Tour Round Bournville Estate', insert in *The Factory in a Garden* (c. 1932). 000 000026

'Visitors' Memoranda' (no date). 024 000033

1.6.5 Bournville Works Magazine (BWM) (listed chronologically)

'The Girls Baths' IV: 1 (November 1905), pp. 5-8

'Gardening Apprentices at the Royal International Horticultural Exhibition' X: 7 (July 1912), p. 211

'Rowheath Farm Estate' XI: 12 (December 1913), p. 38

'Works Council Notes' XV111: 1 (January 1920), p. 3

'Works Council Notes' XVIII: 3 (March 1920), p. 72

'Garden Club at Rowheath' XX: 3 (March 1922), p. 66

'Works Council Notes' XX1: 3 (March 1923), p. 92

'Works Council Notes' XXI: 5 (May 1923), p. 149

'A Quarter of a Century's Survey. Mr Edward Cadbury's Address at the New Year Party' XXII: 3 (March 1924), pp. 73-6

'Bournville's Playing Fields' XXIV: 3 (March 1926), p. 98

'Rowheath' XXVIII: 5 (May 1930), p. 161

'Girls' Grounds' XXIX: 3 (March 1931), p. 68

'The Festivities at Rowheath' XXIX: 7 (July 1931), pp. 163-7

'Our Visitors' BWM XXX: 1 (January 1932), pp. 10-1

'The Garden in the Factory' XXXI: 4 (April 1933), p. 105

'Employees' Gift to the Firm' XXI: 8 (August 1933), pp. 232-38

'Crocuses' XXXII: 3 (March 1934), p. 86

'In Praise of Gardeners' XXXIII: 11 (November 1935), p. 393

'The Bournville Cocoa Tree' XXIV: 7 (July 1936), pp. 210-11

'Opening of the Rowheath Lido' XXV: 8 (August 1937), pp. 245-9

'The Story of the Visitors' Department' XXXVII: 5 (May 1939), pp. 144-48

1.6.6 Films and lantern slides

Lantern slide collections. 000 9999

'British Medical Association visit to Bournville' (26 July, 1911). Film

'Elsie and the Brown Bunny' (c.1921). Film

'The Story of Bournville as Told by the Nightwatchman' (1921). Film

1.7 CEREAL PARTNERS (NESTLÉ) ARCHIVE (CORPORATE AFFAIRS DEPT., SHREDDED WHEAT, WELWYN GARDEN CITY)

Book of Press Cuttings: *The Welwyn Times* (24 April 1970); Mr Pearkes Withers *Daily Mail* (10 August 1928)

Files of photographs, no reference nos.

1.8 CHICAGO PUBLIC LIBRARY: SPECIAL COLLECTIONS

H.R.Koopman (Photographer) 'Pullman: the City of Brick'. Box 8, Series VI Pullman Town, Subseries A: Community Publications, Folder 22

'The Story of Pullman. World Columbian Exposition 1893'. Box 1, Series I The Pullman Company. Subseries A. Articles on the Pullman Company, Folder 10

1.9 FIRST GARDEN CITY HERITAGE MUSEUM, LETCHWORTH, UK (SPIRELLA CORSET COMPANY) (FGCHM)

1.9.1 Spirella Souvenir Guides

Silver Jubilee 1910-1935. FGCHM 466.7

Great Oaks (no date, late 1940s?). FGCHM 100

1.9.2 Spirella Magazines (Monthly, in chronological order)

The Spirella Magazine 21st Birthday Souvenir Number I: 6 (June 1931)

'Notes of the Month' *Threads* IV: 41 (July 1931), pp. 79-81

'The Stroller's Shadow' *Threads* IV: 42 (August 1931), p. 100

'Sports and Pastimes' *Threads* IV: 45 (November 1931), pp. 151-55

'An Old Garden' *The Spirella Magazine* XXI: 8 (August 1932), pp. 116-17

'Our Harvest Home' and 'The Fruits of Industry' *The Spirella Magazine* XXI: 10 (October 1932) pp.148-9

'What I think of our Sports Ground' *Threads* VI: 65 (July 1933), pp. 96-7

1.9.3 *The City. A Monthly Magazine Written and Produced at the First Garden City*

Cockerell, D. 'A Workshop in London and in Letchworth' I: 2 (January 1909), 33-36

Hunter, D. 'Folk Drama' I: 4 (April 1909), 78-81

1.9.4 Exhibition and Film

'Cinema in Letchworth' (2008) including film 'A British Industry's Coming of Age', produced for the 21st anniversary of Spirella in 1931. Reels: 'FGCHM 762', (762.1; 762.2; 762.3)

1.10 HAGLEY LIBRARY, DELAWARE

Classification and Rules: Department of Horticulture: with other information for intending exhibitor/s Worlds Columbian Exposition, Chicago USA. (World's Columbian Exposition, Chicago, U.S.A., 1893). Pam 2000.228

Firestone: Triumphs at 'A Century of Progress' (1933). Pam 99.026

Ford Factory Facts (1915). Pam 97.360

Official Book of the Fair: giving pre-Exposition Information 1932, 1933 of a Century of Progress International Exposition, Chicago 1933 (Chicago, 1932-4). 92.68

1.11 HERTFORDSHIRE LIBRARY, LOCAL STUDIES SECTION (HL)

MS. Digswell Nurseries, Welwyn, Board, Committee and General Meetings minutes, register of members, share ledger (1921-50). D/EFfB45

Plans: 'Louis de Soissons Shredded Wheat Factory, Bridge Road East.' UDC 21 77/130 X/131 (July 1924)

Harmsworth, C. 'A Man and His Book' Reprinted by permission of the *Daily Mail*, c.1910, no page numbers. D/EHO F24

Printed advertising booklet about the Spirella Company with a history of the firm and details of its products used as a scrapbook for newspaper cuttings, 1925-26. DE/HO/F28/2

1.12 IAN ORMEROD ARCHIVE, SOLIHILL

NCR Factory News (May 1953)

NCR 'Company Report' (1940)

NCR 'B Company Report' (1941)

In Memory of John Patterson (1922)

The History of the NCR (2000)

1.13 KING'S LANGLEY MUSEUM AND HISTORICAL SOCIETY

'Ovaltine Welfare Centre' (no date, 1920s?)

'Reminiscences' *Ovaltimes* 1 (December 1961)

'In your garden' *Ovaltimes* 3 (February 1962)

'Horticultural show and fete' *Ovaltimes* 10 (May 1963)

'A Good time was had by all!' *Ovaltimes* 19 (December 1964)

'Flower Festival and Social' *Ovaltimes* 35 (August 1967)

1.14 KRAFT FOODS ARCHIVE, KRAFT FOODS INC., ILLINOIS (KA)

Hallock, J.N. 'Niagara. The Mecca of Travellers from all Lands' *The Christian Work and Evangelist* (November 24, 1906), p. 673

Landscape Garden Department, The Natural Food Company *List of Trees, Shrubs and Vines Suitable for Sidewalk and Lawn Planting*. Includes order form. (Niagara, 1902-3)

The Natural Food Company *Landscape Gardening* (Niagara, 1902)

'The Natural Food Conservatory' *The National Magazine of Boston* (June c. 1901)

1.15 LIBRARY OF CONGRESS, MANUSCRIPT DIVISION, WASHINGTON D.C. OLMSTED ASSOCIATE RECORDS (LC.MD.OAR)

1.15.1 00280 Dayton, Ohio; 03 Subdivisions & Suburban Communities Series B and E Correspondence files (chronologically)

J.C. Olmsted memorandum (25 October 1895). Series E Reel 20

Letter from Olmsted Brothers to NCR Building Committee (1 August 1905). Series B Reel 20

Olmsted Brothers memorandum (6 December 1906). Series B Reel 20

Olmsted Brothers letter to John H. Patterson (1 March 1907). Series B Reel 20

Letters between Colonel Deeds and Olmsted Brothers (June and July 1911). Series B Reel 20

1.15.2 05508 J.H. Patterson, Dayton, Ohio, Correspondence files (chronologically)

Olmsted Brothers report of meeting with John Patterson, (27 May 1912). Reel 257

Olmsted Brothers letter to Colonel E.A. Deeds (18 October 1937). Reel 257

Olmsted Brothers 'Descriptive Memorandum to accompany Plan no. 183' (28 December 1937). Reel 257

Olmsted Brothers report of visit to Dayton (5-7 January 1938). Reel 257

1.15.3 007392 Kohler Company, Factory Grounds, Kohler, Wisconsin 09 Grounds of Commercial and Industrial Firms

Letter to Mr. J.F. Garner, Kohler, advising about planting around office buildings. Reel 375

1.15.4 00066 Perky, Henry D. Niagara Falls 07 Private Estates and Homesteads

Correspondence between Mr Olmstead (sic) and Henry D. Perky, President Natural Food Company. 20,112.1 Reel 10

1.15.5 0077 Solvay Process Co. Syracuse, N.Y. 09 Grounds of Commercial and Industrial Firms

Correspondence with Mr F.H. Hazard, President of Solvay Process Co. regarding plans and planting. Reel 10

1.15.6 009035 Western Electric Company 'Point Breeze Plant', Baltimore, Maryland 09 Ground of Commercial & Industrial Firms.

Letter from Western Electric Co. to Olmsted Brothers, 25 January 1938. Reel 429

1.16 NCR ARCHIVE - THE ARCHIVE CENTER, DAYTON HISTORY, OHIO (NCR.DH)

1.16.1 NCR Unpublished sources

'Boys' Gardens', (lecture script, no date)

Cairns, M. *et al Hills and Dales a Site History* (Dayton, Ohio, September 1991, unpublished report)

'Catalogue of John H. Patterson's personal library'

'For the lecture on Landscape Gardening and Boys' Gardens', (typescript, no date)

'Landscape Gardening', (typescript lecture notes, no date)

- 'Landscape Gardening at the NCR Factory, Dayton, Ohio', (lecture script, no date)
- 'List of New York Clubs and Associations to which Mr John Patterson belongs'
- Menu of Annual Dinner and Distribution of Prizes to the Boy Gardeners at Officers' Club, November Two (*sic*) 1904, 6 pm
- NCR Concert programme, (no date)
- 'NCR Country Club Programme of Activities, Season of 1916'
- NCR News Office 'History of the Boys' and Girls' Gardens', (Press report, 15 March, 1945)
- 'School Garden Festival of the School Garden Association of America in Carnegie Hall New York, 7th July 1916', (Festival programme)
- Scrapbook 190 'Beautification of Dayton 1901-1903', John Patterson's transformation of Dayton
- Scrapbook 191 'Landscape Gardening 1899-1902', Newspaper clippings about NCR factory landscaping, *The Boy Gardener*
- Scrapbook 201 'Gardens, Industrial Welfare 1906', Misc. articles about Boys' Gardens
- Scrapbook 262 'Landscape Gardening 1896-1906', Misc. articles and clippings, programs, speeches, about gardening
- Scrapbook 265 'Landscape Gardening 1904' Reports of NCR efforts in Landscape gardening
- 'Society of American Florists and Ornamental Horticulturalists, 22nd Annual Convention, Dayton Ohio, 21-24 August 1906', (Programme)
- Typescript of notes, following meeting with Patterson to discuss the lantern slide lectures, (no date)

1.16.2 NCR Published sources

- Art, Nature and the Factory* (1904)
- Beware of this Plant, its Poison Ivy* (16 June 1945)
- The Boy Gardeners* (1910)
- Catalogue of Trees, Shrubs and Plants* (1906)
- The Garden Book* (early 1900s?)
- Good, J.M. *The Work of Civic Improvement* (no date)
- Hills and Dales* (no date)
- Hints for Gardening* (originally published by the Cleveland Home Garden Association) (no date)
- How we can Make Dayton a Better City* (1919)
- NCR Nursery Book and Catalogue of Trees, Shrubs, Vines and Hardy Plants* (1905)
- School Garden Association of America *Outdoor Education* 1:2 (November, 1916)

1.16.2 *The NCR, NCR News and other NCR magazines and newsletters* (chronologically)

- '1800 people inspect the model factory' *The NCR* XI: 11 (1 June, 1898), p. 282
- 'The Factory Lecture and its Results' *The NCR* XII: 9 (1 May, 1899), p. 238

- ‘President Patterson’s Welcome Home’ *The NCR* XII: 23 (1 December, 1899), p. 564
 ‘Distinguished visitors’ *The NCR* XIII: 11 (1 June, 1900), p. 227
 ‘Prominent visitors’ *The NCR* XIV: 20 (15 October, 1901), p. 444
 ‘Factory visitors’ *The NCR* XV: 19 (1 October, 1902), p. 760
 ‘Nine thousand visitors’ *The NCR* XVI: 15 (1 September, 1903), p. 599
 ‘Advertising is Teaching’ *The NCR* XVII:1 (June 1904), p.36, reprinted from an article by John Patterson in the *Dayton Journal* (21 May 1904)
 ‘Enjoy Far Hills Hospitality’ *The NCR* XVII: 3 (August, 1904), p. 137
 ‘Athletic Field To Be Enlarged’ *The NCR* XVII: 4 (September 1904), p.181
 ‘Company Adopts Nine-Hour Day’ *World NCR* 1:4 (June, 1906), p.5
 ‘What Can A Girl Do’ *NCR News* 2:5 (November, 1915), p.11 footnote
 ‘Amphitheatre Is Opened’ *NCR News* 3:2 (August, 1916), p.22
 ‘C.C. Feicht Says’ *NCR News* VI:1 (July, 1919), p.36
 ‘Nine tent camps in Hills and Dales have solved the housing problem for some NCR employees’ *Employees Advisory Board Bulletin* 1:6 (July 17 1920)
 ‘Snapshots Wanted’ *NCR News* IX: 4 (April, 1923), p.1
 ‘Old River’ *Pastime* 2:12 (no date, 1938?), p. 1

1.17 NEWBERRY LIBRARY, CHICAGO: PULLMAN COMPANY ARCHIVES

Scrapbooks 1865-1947, Reels 1-9. Series A, Miscellaneous, 1865-1925; Reel 10 Town of Pullman, 1883-1890; Reels 14-16. Series B, Miscellaneous 1883-1924; Reels 22-25 Miscellaneous, 1873-1927. Microfilm 1213

13/01 Photographs, 1872-1976, 04 Building and property photography, 1881-1972. Case Pullman13/01

1.18 NOTTINGHAMSHIRE ARCHIVES: RALEIGH COMPANY ARCHIVES

‘Buildings’. 6/28/2/1/1-117

‘*Building fine bicycles*’ souvenir guide 1950s. DDRN 7/2/22-36

Enlarged photos and prints 24. *Social Activities*. DRN6/24

‘History’. DDRN 7/2/1-36, 3,5,12,17,20,23

Waltham, J. ‘Golden Years of Two Wheels’ *Nottingham Evening Post* (4 October, 1991), p. 6. Press cutting. DDRN 7/2/22-36

1.19 NOTTINGHAM CITY MUSEUMS AND GALLERIES ARCHIVE

John Player, plan for recreation ground, 1938

1.20 FREDERICK LAW OLMSTED, NATIONAL HISTORIC SITE, BOSTON, MASSACHUSETTS. SITE PLANS

1.20.1 Plans of NCR Co’s Works: 00280 Subdivisions & Suburban Communities (chronologically)

Plan of NCR factory and grounds (9 January, 1896). 280-1

Planting plan for NCR factory (13 March, 1896). 280-2
 Planting plan for tract south of factory (10 September, 1904). 280-106
 Sketch for vine-clad pergola (15 September, 1904). 280-112
 Plat of the NCR (4 October, 1904). 280-163-pt2
 Plan of Old River Park (30 August, 1937). 280-163
 Preliminary Plan for Old River Park. 280-106, Plan 183
 Bird's Eye View of Old River Park. 280z4-pt 1

1.20.2 Solvay Process Co., Syracuse N.Y. plans 00077 (chronologically)

Preliminary plan for Administration Grounds (2 July 1901). 77-5
 Preliminary plan for Administration Grounds (7 October 1901). 77-11
 Plans for Administration Grounds (15 October 1901). 77-12

1.21 PORT SUNLIGHT VILLAGE TRUST, SUNLIGHT VISION (LEVER BROS. LTD.) (PSVT.SV)

'The Allotment Gardens' *Port Sunlight Monthly Journal* (March, 1895), p. 23
 'Mr Lever in the United States' *Port Sunlight Monthly Journal* (April, 1895), p.36
 'The Advantages of Establishing a Gymnasium at Port Sunlight' *Port Sunlight Monthly Journal* (June, 1895), p. 68
 'Mr Patterson and Port Sunlight' *Progress*, 1:1 (October 1899), p. 35
 'Port Sunlight a Garden of Eden' *Progress* 1:12 (September 1900), p. 498
Port Sunlight (Port Sunlight souvenir guide, 1909)

1.22 UNIVERSITY OF WARWICK MODERN RECORDS CENTRE

1.22.1 Industrial Welfare Society: unpublished sources

List of Firms [members] (1936?). MSS.303HF/1/b
 List of firms (and subscriptions) related to the IWS in the Birmingham area (no date).
 MSS HF/1/e
 Collection of pamphlets about the IWS and its activities and history, 1920-1944.
 MSS.303/HF/1/i

1.22.2 Industrial Welfare Society: published sources

Recreation in Industry (London, 1938). MSS.303/AP/B
 Lord Verulam and Youngman, G. P. *Factory Gardens* (London, 1955).
 MSS.303/AP/B

1.22.3 Industrial Welfare (renamed Industrial Welfare and Personnel Management in 1929 (listed chronologically)

'Phoenix Dynamo Manufacturing Co.' I (October 1919), p. 190
 'Proposed layout of Recreation ground of the Fairfield Shipbuilding and Engineering Co Ltd Govan, designed by Commander Coote of the Industrial Welfare Society' III (February 1921), p. 63

- (Notes about firms with roof gardens) III (May 1921) 195; (July 1921) 295; VII (September 1925) 328; XXVIII(May/June 1946)
- 'Note on the support of the NCR to the IWS, lending films etc.' IV (January 1922), p. 36
- 'Miners' Welfare. Recreation for Children' VI (June 1924), pp. 162-3
- Paterson, J.G. 'Recreation' VII (May 1925), pp. 162-4
- 'Notes from the districts' [Wishaw Miner's Welfare Grounds] VII (May 1925), pp. 174-6
- 'Note on Sports club for employees of Oxo' VII (May 1925), pp. 182-3
- 'Industrial Welfare Work at a Northern Biscuit Factory' X (March 1928), pp. 78-81
- 'Health and Sickness in Industry' XI (February 1929), p. 41
- 'Factory Landscape Gardening' XII (March 1930), p. 89
- 'Women in Industry' XII (April 1930), p. 122
- Paterson, Capt J.G. 'Recreation in Industrial Life' XIV (June 1932), pp. 368-369
- 'A Modern Factory' XV (April 1933), pp. 18-21
- 'Outdoor Recreation for Employees' XVI (April 1934), pp. 10-12
- 'Factory Welfare Work in a Small Town' XVIII (April 1936), pp. 34-4
- 'Gillette Industries' XIX (April 1937), pp. 24-6
- 'A Worker's View of Recreation' XIX (September 1937), pp.14-15
- 'Rest out of doors' XXIII (June 1941), p. 14
- XXVIII (May/June 1946), p. 113
- 'Kellett, Woodman & Co.' XXIX (Jan/Feb 1947), p. 31
- 'Garden Competition' (Hoover) XXXIV (Nov/Dec 1952), p. 182
- 'Factory Garden' XXXVI (May/June 1954), p. 80

1.22.4 The Lady Allen Collection

- Group of texts on roof gardens and balconies, undated [1930s]. MSS.121/HO/7/1/4-10
- Selfridge's roof garden (1928). MSS.121/HO/12/1

2.0 PRINTED PRIMARY SOURCES: BOOKS AND PAMPHLETS

- Adams, T. *Playparks* (The Coronation Planting Committee, 1937)
- Appelbaum, S. *The Chicago World's Fair of 1893. A Photographic Record* (New York, 1980)
- Arnim, E. *Elizabeth and her German Garden* (London, 1909)
- Atkins, J. B. *National Physical Training: An Open Debate* (London, 1904)
- Beard, M. *A Short History of the American Labor Movement* (New York, 1920)
- Bliss, W.D.P. (ed.) *The Encyclopedia of Social Reform* (New York, London, 1897)
- Blomfield, R. *The Formal Garden in England* (London, New York, Macmillan, 1892)
- Boettiger, L. A. *Employee Welfare Work: a Critical and Historical Study* (New York, 1923)

- Bucknell, L.H. *Industrial Architecture* (London, 1935)
- Burnap, G. *Parks: their Design, Equipment and Use* (London, Philadelphia, Montreal, 1916)
- Cadbury, E. *Experiments in Industrial Organisation* (London, 1912)
- Cadbury, G. *Town Planning* (London, 1915)
- Comstock, W. P. *The Housing Book* (New York, 1919)
- Cook, E. W. *Betterment, Individual, Social and Industrial* (New York, 1906)
- Crowther, S. *John H. Patterson. Pioneer in Industrial Welfare* (Garden City New York, 1923)
- Doty, Mrs. D. *The Town of Pullman. Its Growth with brief accounts of its Industries* (Pullman, Ill., 1893)
- Fairman, L *The Growth of a Great Industry* (Pittsburgh, H.J.Heinz Co., c.1900)
- Gardiner, A.G. *The Anglo-American Future* (Oxford, 1920)
- Gardiner, A.G. *The Life of George Cadbury* (London, 1923)
- Gilman, N. P. *A Dividend to Labor: A Study of Employer's Welfare Institutions* (New York, 1899)
- Gloag, J. (ed.) *Design in Modern Life* (London, 1934)
- Gloag, J. *Men and Buildings* (London, New York 1931)
- The Goodyear Tire and Rubber Co. The Work of the Labor Division* (Akron, Ohio, 1920)
- Green, M.L. *Among School Gardens* (New York, 1910)
- Hall, S. *Adolescence: its psychology, and its relation to physiology, sociology, sex, crime, religion and education* (2 vols., New York, Appleton, 1904)
- Holme, C.G. *Industrial Architecture* (London, 1935)
- Hoole, H. *The Relation of Athletic Sports to Public Health* (London, c. 1891)
- Howard, E. *Garden Cities of Tomorrow* (London, 1902)
- Howard, E. *To-morrow: a Peaceful Path to Real Reform* (London, 1898)
- The Human Factor in Industry* (London, National Institute for Industrial Psychology, c.1930)
- Inaugural Ceremonies in Honour of the Opening of Fountain Gardens, Paisley* (Paisley, J. & J. Cook, 1868)
- Ives, H.C. (ed.) *Dream City: a portfolio of photographic views of the World's Columbian Exposition* (Chicago, 1893)
- John Player *From Plantation to 'Players'. A Brief History of Tobacco Including Cultivation and Manufacture* (Nottingham, 1936)
- Johnston, the Rev. J. *Parks and Playgrounds for the People* (London 1885)
- Kahn, M. *The Design and Construction of Industrial Buildings* (London, 1917)
- Kelly, E. T. (ed.) *Welfare Work in Industry* (London, 1925)
- Lever Bros. Ltd. *Employees Handbook* (Port Sunlight, no date)
- Lever, W.H. *Viscount Leverhulme by his Son* (London, 1927)
- Mawson, T.H. *Civic Art: Studies in Town Planning, Parks, Boulevards and Open Spaces* (London, 1911)
- Mawson, T.H. *The Life and Work of an English Landscape Architect: an Autobiography by Thomas H. Mawson* (Manchester, 1927)

- Meakin, B. *Model Factories and Villages: Ideal Conditions of Labour and Housing* (London, 1905)
- Miller, L.K. *Children's Gardens for School and Home* (New York, 1904)
- Miller, W. *What England can Teach us about Gardening* (London, Hodder & Stoughton, 1911)
- Morell and Nicols Landscape Architects *Landscape Architecture* (Minneapolis 1911) (Google Books website <http://books.google.uk>, accessed 1 June, 2010)
- Morris, W. *A Factory as it Might Be* (Nottingham, 1995) (First published in *Justice* April/May 1894)
- Mosely Industrial Commission *Mosely Industrial Commission to the United States of America Oct-Dec 1902. Reports of the Delegates* (London, 1903)
- National Industries Conference Board *What Employers are Doing for Employees: a Survey of Voluntary Activities for Improvement of Working Conditions in American Business Concerns* (New York, 1936)
- National Institute of Industrial Psychology *Rest-Pauses and Refreshments in Industry* (London, 1939)
- Official Pictures of a Century of Progress International Exposition, Chicago, 1933* (1933)
- Olmsted, J. C. 'A Comprehensive System of Parks and Parkways. Seattle' (1903) (History Link. Free Online Encyclopedia of Washington State History. www.historylink.org, accessed 24 May 2010)
- Olmsted, F.L. *Walks and Talks of an American Farmer in England* (New York, 1852)
- Owen, R. *A New View of Society* (Oxford, New York 1991, first published 1817)
- Perky, H. *The Vital Question* (Worcester, MA, 1897)
- Price, G. M. *The Modern Factory: Safety, Sanitation and Welfare* (New York, London, 1914)
- Proud, E. D *Welfare Work. Employers' Experiments for Improving Working Conditions in Factories* (London, 1916)
- Rogers, T. B. *A Century of Progress 1831-1931* (Bournville, London, 1931)
- Rowntree, B.S. *The Human Factor in Business* (London, 1925)
- Rowntree, B.S. *The Human Needs of Labour* (Edinburgh, New York, London, 1918)
- Ruskin, J. *Sesame and Lilies* (1866) (London, 1904)
- Ruskin, J. *Unto this Last* (London, 1994, originally published: London, 1906)
- Shadwell, A. *Industrial Efficiency: a Comparative Study of Industrial Life in England, Germany and America* (London, New York, Bombay, Calcutta, 1909)
- Shredded Wheat Co. *The Wonders of Niagara: Scenic and Industrial* (Niagara, c1905)
- Sitwell, Sir G. *On the Making of Gardens* (New York and London, 1951, originally published 1909)
- Souster, E.G.W. *The Design of Factory and Industrial Buildings* (London, Scott Greenwood & Son, 1919);
- Tarbell, I. M. *New Ideals in Business. An Account of their Practice and their Effects upon Men and Profits* (New York, 1916)
- Tolman, W. *Social Engineering* (New York, McGraw Hill, 1909)
- Veblen, T. *The Theory of the Leisure Class*, 2nd edn. (New York, London, 1912)
- Williams, W. *What's on the Worker's Mind? By One who put on Overalls to Find Out*

(New York, 1920) (Google Books website <http://books.google.uk>, accessed 17 October 2010)

3.0 PRINTED PRIMARY SOURCES: NEWSPAPERS AND JOURNALS

- 'Celebrations - Visit to Factory in a Garden' *Glasgow Evening Times* (Monday 22 June 1931)
- Clarke, G.D. 'Landscape Architecture at the New York World's Fair. 1' *Landscape Architecture* XXIX: 4 (July 1939)
- 'Come Lassies and Lads! Sports for Young Workers at Model Bournville' *The Bystander* 12:156 (November 28 1906), p. 432
- Crittall, W.F. 'Silver End' *DIA Quarterly Journal* 13 (October 1930)
- Editorial 'Opportunity' *The Architects' Journal* 35 (1932)
- Ely, Richard T. 'Pullman: a Social Study' *Harper's Magazine* 70 (February 1885), 452-466
- 'Industrial Gardens' *Landscape and Garden* III:IV (Winter 1936), 230-233
- Mawson, T. 'The Position and Prospects of Landscape Architecture in England' *Town Planning Review* 2:3 (October 1911), 225-229
- 'New parks and public spaces for Birmingham' *The Gardeners' Chronicle* 1739:LXVII (April 24 1920)
- 'Our Public Parks' *The Gardeners' Chronicle* 1247:XLVII (November 26 1910)
- 'Pentagon', 'Cadbury. A visit to the famous works at Bournville' *Grocery* (November 1899), 697-700
- 'Pentagon', "'Sunlight Soap from Sunlit Lands": a visit to the works of Lever Brothers Ltd at Port Sunlight, near Birkenhead' *Grocery* (June 1899), 227-39
- Pettigrew, W. W. 'Municipal Parks: layout, management and administration, together with a short treatise on the organisation of a public parks department' *The Journal of Park Administration* (London, 1937), p.3
- Ryan, J. 'The Krupp Works at Essen' *Irish Monthly Journal* 51:604 (October 1923), 511-20
- Schumm, P.B. 'The Central Park of New York City' *Landscape Architecture* XXVII: 3 April 1937), 115-144
- 'The Spirella Co' *Daily Record* (9 March 1911) (Historic Niagara, Digital Collections, Niagara Falls Public Library, <http://www.nflibrary.ca/nfplindex/results.asp>, accessed 26 June 2006)
- Walker, I.G., 'Commercial Gardens' *Landscape and Garden* 1: 4 (Winter 1934), 47-50
- Wallis, T. 'Factories' *Journal of the RIBA* 40:2 (23 February 1933), 301-312
- 'A Workshop in a Garden. In Blissful Bournville, Messrs. Cadbury's Model Village' *The Bystander* 9:115 (February 14 1906), 354-5

4.0 SECONDARY SOURCES: BOOKS

- Adelman, W. (1977) *Touring Pullman. A Study in Contemporary Paternalism*, (Chicago, 1977)
- Aguar, C.E. and B. *Wrightscapes. Frank Lloyd Wright's Landscape Designs* (New York, London etc., 2002)
- Alberts, R.C. *The Good Provider. H.J. Heinz and his 57 Varieties* (London, 1973)
- Allyn, S. C. *My Half Century with NCR* (New York, 1968)
- Anderson, J. M. *Industrial Recreation. A Guide to its Organization and Administration* (New York, Toronto and London, 1955)
- Andrews, M. *Landscape and Western Art* (Oxford, 1999)
- Auricoste, I. 'Leisure Parks in Europe: Entertainment and Escapism' in Mosser, M. and Teyssot, G. *The History of Garden Design. The Western Tradition from the Renaissance to the Present Day* (London, 1991)
- Bailey, P. *Leisure and Class in Victorian England. Rational Recreation and the Context for Control 1830-1885* (London, 1987) and 2nd edition (London, 2006)
- Bailey, P. *Popular Culture and Performance in the Victorian City* (Cambridge, 1998)
- Barthes, R. *Camera Lucida: Reflections on Photography* (London, 2000)
- Bartram, M. *The Pre-Raphaelite Camera: aspects of Victorian Photography* (London, 1985)
- Beauchampé, S. and Inglis, S. *Played in Birmingham. Charting the Heritage of a City at Play* (Birmingham, 2006)
- Beckett, J. (ed.) *A Centenary History of Nottingham* (Manchester, 1997)
- Beevers, R. *The Garden City Utopia. A Critical Biography of Ebenezer Howard* (Basingstoke, 1988)
- Bellamy, E. *Looking Backward* (London, no date)
- Bender, T. *Towards an Urban Vision* (Baltimore and London, 1982)
- Benjamin, W. 'Extracts from *The Work of Art in the Age of Mechanical Reproduction*' in Wells, L. *The Photography Reader* (London and New York, 2003)
- Benjamin, W. 'Little History of Photography' in Jennings, M.W., Doherty, B., Levin, T.Y. (eds.) *The Work of Art in the Age of its Technological Reproducibility' and other Writings on Media* (Cambridge MA, 2008)
- Benton, A. *Cheals of Crawley: the Family Firm at Lowfield Nurseries 1860s-1960s* (Uckfield, 2002)
- Beveridge, C. E. *Master List of Design Projects of the Olmsted Firm 1857-1950* (New York, 1987)
- Biggs, L. *The Rational Factory Architecture, Technology and Work in the Age of America's Mass Production* (Baltimore and London, 1996)
- Birksted, J. *Landscape of Memory and Experience* (London, 2000)
- Birksted, J. *Relating Architecture to Landscape* (London, 1999)
- Birnbaum, C.A., Kason, R. *Pioneers of American Landscape Design* (New York and London, 2000)
- Boone, T. *Youth of Darkest England: Working Class Children at the Heart of Victorian Empire* (London and New York, 2005)

- Bourke, J. *Working Class Cultures in Britain* (London, 1994)
- Bournville Village Trust *Sixty Years of Planning: the Bournville Experiment* (Bournville, no date, 1940s?)
- Bournville Village Trust *When we Build Again. A Study based on Research into conditions of living and working in Birmingham* (London, 1941)
- Brandes, S.D. *American Welfare Capitalism 1880-1940* (Chicago, 1976)
- Brody, D. *Workers in Industrial America: Essays on the Twentieth Century Struggle* (New York and Oxford, 1980)
- Brown, E.H. *The Corporate Eye. Photography and the Rationalization of American Commercial Culture* (Baltimore and London, 2005)
- Brown, J. *The Pursuit of Paradise. A Social History of Gardens and Gardening* (London, 1999)
- Bryson, J.R. and Lowe, P.A. 'A hundred years of social housing in a model village' in Gerrard, A.J. and Slater, T.R. (eds.) *Managing a Conurbation. Birmingham and its Region* (Studley, Warwicks., 1996)
- Buder, S. *Pullman: an Experiment in Industrial Order and Community Planning 1880-1939* (New York and Oxford, 1967)
- Buder, S. *Visionaries and Planners: The Garden City Movement and the Modern Community* (New York and Oxford, 1990)
- Buenker, J.D., Burnham, J. C. and Crunden, R.M. *Progressivism* (Cambridge, MA, 1977)
- Bullock, N. and Read. J. *The Movement for Housing Reform in Germany and France* (Cambridge, 1985)
- Burrell, G and Dale K. 'Utopiary: Utopias, Gardens and Organisation' in Parker, M. (ed.) *Utopia and Organization* (Oxford, 2002)
- Cadbury, D. *Chocolate Wars. From Cadbury to Kraft: 200 Years of Sweet Success and Bitter Rivalry* (London, 2010)
- Cadwallader, D. (ed.) *Where Shall I Live? Letchworth: the First Garden City. A Design for Living* (Letchworth, Herts, 1978)
- Cahn, W. *Out of the Cracker Barrel; the Nabisco story, from Animal Crackers to Zuzus* (New York, 1969)
- Cannons, H. G. T. *Bibliography of Industrial Efficiency and Factory Management (Books, Magazine Articles etc)* (London and New York, 1920)
- Chapman, S. *Jesse Boot of Boots the Chemists. A Study in Business History* (London, 1973)
- Cochran, T.C. and Miller, W. *The Age of Enterprise. A Social History of Industrial America* (New York, 1965)
- Cochran, T.C. *Social Change in Industrial Society: Twentieth Century America* (London, 1972)
- Colvin, B. *Land and Landscape* (London, 1970)
- Conway, H. *People's Parks: the Design and Development of Victorian Parks in Britain* (Cambridge, 1991)
- Coolidge, J. *Mill and Mansion. Architecture and Society in Lowell, Massachusetts, 1820-1865*, 2nd edition (Amherst, 1993)
- Cooper, D. *A Philosophy of Gardens* (Oxford, 2006)
- Corley, T.A.B. 'How Quakers coped with business success: Quaker industrialists 1860-

- 1914' in Jeremy, D.J. (ed.) *Business and Religion in Britain* (Aldershot, 1988)
- Corner, J. (ed.) *Recovering Landscape. Essays in Contemporary Landscape Architecture* (New York, 1999)
- Cosgrove, D. *Geography and Vision: Seeing, Imagining and Representing the World* (London, 2008)
- Cosgrove, D. *Social Formation and Symbolic Landscape* (London, 1984)
- Cosgrove, D. and Daniels S. (eds.) *The Iconography of Landscape* (Cambridge, 1988)
- Cranz, G. *The Politics of Park Design* (Cambridge, MA, 1982)
- Cranz, G. 'Reform Parks in the United States (1900-1930)' in Mosser, M. and Teysot, G. *The History of Garden Design. The Western Tradition from the Renaissance to the Present Day* (London, 2000)
- Crawford, M. *Building the Working Man's Paradise: the Design of American Company Towns* (London, 1995)
- Creese, W. 'Imagination in the Suburb' in Knoepfelmacher, U.C. and Tennyson, B. *Nature and the Victorian Imagination* (Berkeley, Los Angeles and London, 1977)
- Creese, W. L. *The Search for Environment. The Garden City: Before and After* (New Haven and London, 1966)
- Crosfield, J.F. *A History of the Cadbury Family* (2 vols., London, c.1985)
- Crouch, D. and Ward, C. *The Allotment: its Landscape and Culture* (Nottingham, 1997)
- Cutler, P. *The Public Landscape & the New Deal* (New Haven and London, 1985)
- Daniels, S. *Fields of Vision. Landscape Imagery and National Identity in England and the United States* (Cambridge, 1993)
- Darley, G. *Villages of Vision* 2nd edn. (Nottingham, 2007)
- Darley, G. *The Factory* (London, 2003)
- Dixon Hunt, J. *The Afterlife of Gardens* (London, 2004)
- Dixon Hunt, J. 'The Garden as Cultural Object' in Wrede, S. and Adams, W.H., (eds) *Denatured Visions. Landscape and Culture in the 20th Century* (New York, 1991)
- Dixon Hunt, J. *Gardens and the Picturesque. Studies in the History of Landscape Architecture* (Cambridge, MA and London, 1997)
- Dixon Hunt, J. *Greater Perfections. The Practice of Garden Theory* (London, 2000)
- Eisenstein, S. 'Give us bread but give us roses': *Working Women's Consciousness in the United States 1890 to the First World War* (London, 1983)
- Elliott, B. *Victorian Gardens* (London, 1986)
- Eserin, A. (ed.) *Welwyn Garden City/The Archive Photo Series* (Stroud, 1995)
- Filler, R. *A History of Welwyn Garden City* (Chichester, 1986)
- Fishman, R. *Bourgeois Utopias: the Rise and Fall of Suburbia* (New York, 1987)
- Fishman, R. *Urban Utopias in the 20th Century: Ebenezer Howard, Frank Lloyd Wright, Le Corbusier* (New York, 1977)
- Fitzgerald, R. *British Labour Management and Industrial Welfare 1846-1939* (London, New York and Sydney, 1988)
- Flanders, J. *Consuming Passions. Leisure and Pleasure in Victorian Britain* (London, 2006)
- Ford, B. (ed.) *Early 20th Century Britain* (Cambridge, 1992)
- Forsyth, A. *Buildings for the Age. New Building Types 1900-1939* (London, 1982)

- Foster, D. and Kennedy, J. *H.J. Heinz Company. Images of America. Worker's Utopia* (Charleston, 2006)
- Foucault, M. *Discipline and Punish. The Birth of the Prison* (London, 1991)
- Fox, S. *The Mirror Makers: a History of American Advertising and its Creators* (New York, 1984)
- Francis, M. and Hester, R. T. (eds.) *The Meaning of Gardens* (Cambridge, MA and London, 1990)
- Freestone, R. *Model Communities. The Garden City Movement in Australia* (Melbourne, 1989)
- Garner, J. S. *The Company Town: Architecture and Society in the Early Industrial Age* (New York and Oxford, 1992)
- Gater, S. and Vincent, D. *Factory in a Garden: Wedgwood from Etruria to Barlaston, the Transitional Years* (Keele, 1988)
- Gerard, A.J. and Slater, T.R. *Managing a Conurbation. Birmingham and its Region* (Studley, Warwicks., 1996)
- Graham, D. *Rock my Religion. Writings and Art Projects 1965-1990* (Cambridge, MA, 1993)
- Graves, R. and A. Hodge *The Long Weekend: a Social History of Great Britain 1918-1939* (London, 1940)
- Greenhalgh, P. *The Modern Ideal. The Rise and Collapse of Idealism in the Visual Arts* (London, 2005)
- Griffin, A. 'The Interior Garden and John Stuart Mill' in Knoepflmacher, U.C. and Tennyson, G.B. (eds.) *Nature and the Victorian Imagination* (Berkeley and Los Angeles, 1977)
- Gross, L.P. and Snyder, T.R. *Philadelphia 1876 Centennial Exhibition* (Charleston, 2005)
- Gumbley, E. *Bournville: A Portrait of Cadbury's Garden village in Old Picture Postcards* (Market Drayton, 1991)
- Hackett Fischer, D. *Albion's Seed. Four British Folkways in America* (New York and Oxford, 1989)
- Hales, P. *Silver Cities: the Photography of American Urbanization 1839-1915* (Philadelphia, 1984)
- Hapgood, L. *Margins of Desire. The Suburbs in Fiction and Culture, 1880-1925* (Manchester and New York, 2005)
- Hareven, T.K. *Family Time and Industrial Time. The Relationship between the Family and Work in a New England Industrial Community* (Cambridge, 1982)
- Harris J. *Private Lives Public Spirit: a Social History of Britain 1870-1914* (Oxford, 1993)
- Harrison, B.H. *Drink and the Victorians. The Temperance Question in England 1815-1872* (Keele, 1994)
- Harrison, M. *Bournville: Model Village to Garden Suburb* (Chichester, 1999)
- Harvey D. *Spaces of Hope* (Berkeley, 2000)
- Harwood, E. and Saint. A. *London*, (London, 1991)
- Hays, S. P. *The Response to Industrialism 1885-1914* (Chicago, 1957)
- Hildebrand, G. *Designing for Industry. The Architecture of Albert Kahn* Cambridge, MA and London, 1974)

- Historic Scotland *Nomination of New Lanark for Inclusion in the World Heritage List* (Edinburgh, 2000)
- Holroyd, A. *Saltaire and its Founder* (Saltaire, 2000)
- Holt, I. *British Artists and the Modernist Landscape* (Aldershot, 2003)
- Hunter Bradley, B. *The Works: the Industrial Architecture of the United States* (New York, 1999)
- Huxley, A. *Brave New World* (London, 1955)
- Ireson, W.G. *Factory Planning and Plant Layout* (New York 1952)
- Irwin, W. *The New Niagara. Tourism, Technology and the Landscape of Niagara Falls 1776-1917* (Pennsylvania, 1996)
- Jackson, J. B *The Necessity for Ruins and Other Topics* (Amherst, 1980)
- Jackson, K. T. *Crabgrass Frontier. The Suburbanisation of the United States* (New York and Oxford, 1981)
- Jacoby, S. M. *Employing Bureaucracy: Managers, Unions and the Transformation of Work in American Industry 1900-1945* (New York, 1985)
- Jeansonne, G. and Luhrssen D. *'A Time of Paradox': America since 1890* (New York, Toronto and Oxford, 2006)
- Johnson, P.E. *Hidden Hands. Working Class Women & Victorian Social Problem Fiction* (Athens, OH 2001)
- Jones, E. *Industrial Architecture in Britain 1750-1939* (London, 1985)
- Jones, M. A. *The Limits of Liberty: American History 1607-1992* (Oxford, 1995)
- Jones, S. G. *Sport, Politics and the Working Classes. Organised Labour and Sport in Inter-War Britain* (Manchester, 1992)
- Joseph Rowntree Village Trust *One Man's Vision. The Story of the Joseph Rowntree Village Trust* (London, 1954)
- Joyce, P. *Work, Society and Politics, the culture of the factory in later Victorian England* (Aldershot, 1991)
- Kaplan, M. *Leisure in America: a Social Enquiry* (New York, 1965)
- Kearns, G. and Withers, C. W. J. *Urbanising Britain: Essays on Class and Community in the Nineteenth Century* (Cambridge, 1991)
- Kennedy, C. *The Merchant Princes. Family Fortune & Philanthropy: Cadbury, Sainsbury and John Lewis* (London, 2000)
- Kessler, B. and Zang, D. *The Play Life of a City: Baltimore's Recreation and Parks 1900-1955* (Baltimore, c.1989)
- Klaus, S. *A Modern Arcadia: Frederick Law Olmsted Jr. and the plan for Forest Hill Gardens* (Amherst and Boston, 2002)
- Kleinberg, S.J. *Women in the United States 1830-1945* (New Brunswick, 1999)
- Knoepfmacher, U.C. and Tennyson, G.B. (eds.) *Nature and the Victorian Imagination* (Berkeley and Los Angeles, University of California Press, 1977)
- Kofman, E. and Lebas, E. (eds.) *Henri Lefebvre. Writings on Cities* (Oxford, 1996)
- Lang, M. H. *Designing Utopia. John Ruskin's Urban Vision for Britain and America* (Montreal, New York and London, 1999)
- Lawson, L. *City Bountiful: a Century of Community Gardening in America* (Berkeley, Los Angeles and London, 2005)

- Le Bas, E. 'The Clinic, the Street and the Garden: Municipal Film-making in Britain between the Wars' in Konstantarakos, M. *Spaces in European Cinema* (Bristol and Wilmington, 2000)
- Le Corbusier *Towards a New Architecture* (London, 1986)
- Lefebvre, H. *The Production of Space* (Oxford, 2007)
- Linehan, D. 'A New England: Landscape, Exhibition and Remaking Industrial Space in the 1930s' in Gilbert, D., Matless, D and Short, B. *Geographies of British Modernity. Space and Society in the Twentieth Century* (Malden MA and Oxford, 2003)
- Lukes, S. *Power. A Radical View* (Basingstoke, 2005)
- Mackertich, T and P. *Facade: a Decade of British and American Commercial Architecture* (London, 1976)
- Macleod, D. I. *The Age of the Child: Children in America 1890-1920* (New York, 1998)
- Macy, C. and Bonnemaision, S. *Architecture and Nature: Creating the American landscape* (London and New York, 2003)
- Maddren, M. (ed.) *Letchworth Recollections* (Baldock, 1995)
- Mailer, C., Musgrave, P. and Desmons, G. *The History of the Industrial Society 1918-1986* (London, 1986)
- Mandell, N. *The Corporation as Family* (Chapel Hill and London, 2002)
- Mandler, P., Pedersen, S. et al. *After the Victorians: Private Conscience and Public Duty in Modern Britain* (London, 1994)
- Marks, W. *George Cadbury Junior 1878-1954* (Birmingham, 195?)
- Marx L. *The Machine in the Garden: Technology and the Pastoral Ideal in America* New York (New York and Oxford, 1964)
- Matless, D. *Landscapes and Englishness* (London, 1998)
- McKibbin, R. *Classes and Cultures. England 1918-51* (Oxford, 1998)
- Meacham, S. *Regaining Paradise. English and the Early Garden City Movement* (New Haven and London, 1999)
- Meller, H. *Leisure and the Changing City 1870-1914* (London, 1976)
- Meller, H. *Towns, Plans and Society in Modern Britain* (Cambridge, 1997)
- Messariss, P. *Visual Persuasion. The Role of Images in Advertising* (London, 1997)
- Metcalf, A. *Leisure and Recreation in a Victorian Mining Community: the Social Economy of Leisure in North East England 1820-1914* (London and New York, 2006)
- Miller, M. *The Garden as an Art* (Albany, 1993)
- Miller, M. *Letchworth. The First Garden City* (Chichester, 1989)
- Mills, E.D. *Factory Building* (London, 1967)
- Mills, E.D. *The Modern Factory* (London, 1951)
- Mitchell, W.J.T. *Landscape and Power* (Chicago, 1995)
- Mosser, M. and Teyssot, G. *The History of Garden Design. The Western Tradition from the Renaissance to the Present Day* (London, 2000)
- Mozingo, L. A. 'Campus, Estate and Park. Lawn Culture Comes to the Corporation' in Wilson, C. and Groth, P. (eds.) *Everyday America. Cultural Landscape Studies after J.B. Jackson* (Berkeley, Los Angeles and London, 2003)
- Muir, R. *Approaches to Landscape* (Basingstoke, 1999)
- Mumford, L. *Roots of Contemporary American Architecture* (New York, 1952)

- Nash, R. *Wilderness and the American Mind* (New Haven and London, 1982)
- Nead, L. *Myths of Sexuality. Representation of Women in Victorian Britain* (Oxford, 1988)
- Nelson, D. *Frederick W. Taylor and the Rise of Scientific Management* (Madison, 1980)
- Nevett, T. R. *Advertising in Britain: a History* (London, 1982)
- The New Lanark Trust *New Lanark Roof Garden* (New Lanark, 2008)
- Nixon, N. and Hill, J. *Mill Life at Styal* (Altrincham, 1986)
- Nye, D.E. *Image Worlds. Corporate Identities at General Electric, 1890-1930* (Cambridge, MA, 1985)
- Ohmann, R. *Selling Culture: Magazines, Markets and Class at the Turn of the Century* (London and New York, 1996)
- Olmsted, F. L. *Public Parks and the Enlargement of Towns* (Manchester NH, 1970)
- Ottewill, D. *Edwardian Gardens* (New York and London, 1989)
- Pascal, J. *Jacob Riis: Reporter and Reformer* (Oxford and New York, 2005)
- Pavitt, J. 'From the garden to the factory: urban visions in Czechoslovakia between the Wars' in Gee, M., Kirk, T., Steward, J. *The City in Central Europe. Culture and Society from 1800 to the Present* (Aldershot, 1999)
- Peiss, K. *Cheap Amusements. Working Women and Leisure in Turn-of-the-Century New York* (Philadelphia, 1986)
- Perkin, H. *The Origins of Modern English Society* (London and New York, 2002)
- Perkin, H. *The Rise of Professional Society since 1880* (London and New York, 1989)
- Pevsner, N. *History of Building Types* (London, 1997)
- Pierce, M. *Letchworth Garden City: A Centenary Celebration of the World's First Garden City in Picture Postcards* (Letchworth, 2002)
- Pollard, S. *The Genesis of Modern Management. A Study of the Industrial Revolution in Great Britain* (Aldershot, 1993)
- Pollard, S. *A History of Labour in Sheffield* (Liverpool, 1959)
- Potter, S. *The Magic Number. The Story of '57'* (London, 1959)
- Priestley, J.B. *English Journey* (London, 1934)
- Purdom, C.B. *The Building of Satellite Towns: a contribution to the study of town Development and Regional Planning* (London, 1949)
- Quinan, J. *Frank Lloyd Wright's Larkin Building: Myth and Fact* (Chicago, 2006)
- Richards, T. *The Commodity Culture of Victorian England* (London, 1991)
- Richardson, T. *English Gardens of the Twentieth Century: from the Archives of Country Life* (London, 2005)
- Roberts, D. *Life at Levers: Memories of Making Soaps at Port Sunlight* (Wirral, c.1995)
- Roberts, E. *A Woman's Place. An Oral History of Working Class Women 1890-1940* (Oxford, 1984)
- Robinson, C. Mulford. *Modern Civic Art* (London, 1998)
- Rodgers, D.T. *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge MA. and London, 1998)
- Rosenblum, N.A. *World History of Photography* (London and New York, 1997)
- Rosenzweig, R. *Eight hours for what we will: Workers and Leisure in an Industrial City, 1870-1920* (Cambridge, 1983)

- Ross, S. S. *What Gardens Mean* (Chicago and London, 1988)
- Sackville-West, V. *The Edwardians* (London, 1983)
- Sackville-West, V. *English Country Houses* (London, 1941)
- Samuel, R. *Theatres of Memory* (2 vols., London, 1994)
- Schama, S. *Landscape and Memory* (London, 1995)
- Scott, R. *Elizabeth Cadbury 1858-1951* (London, 1955)
- Shaw, G.B. *Major Barbara* (London, 1970)
- Simmons, J. C. *Star Spangled Eden: 19th Century America through the eyes of Dickens, Wilde, Francis Trollope, Frank Harris and other British Travellers* (New York, 2000)
- Skinner, J. S. *Form and Fancy: Factories and Factory Buildings by Wallis, Gilbert & Partners 1916-1939* (Liverpool, 1997)
- Smith, C., Child, J. and Rowlinson, M. *Re-Shaping Work: The Cadbury Experience* (Cambridge, 1990)
- Snively, J.R. *The Hershey Story* (Hershey, 1950)
- Sniderman Bachrach, J. *The City in a Garden: a Photographic History of Chicago Parks* (Harrisonburg and Santa Fé, 2001)
- de Soissons, M. *Welwyn Garden City: a Town Designed for Healthy Living* (Cambridge, 1988)
- Soltow, M. J. and S. Gravell *Worker Benefits. Industrial Welfare in America 1900 – 1935. An Annotated Bibliography* (Metuchen NJ and London, 1983)
- Sontag, S. *On Photography* (London, 2008)
- Spain, A. *A Taste of Ovaltine: The Official Story* (2002)
- Stevenson, E. *Park Maker: A Life of Frederick Law Olmsted* (New York and London, 1977)
- Stevenson, J. *British Society 1914-45* (London, 1984)
- Stilgoe, J. R. *Borderland: the Origins of the American Suburb 1820-1939* (New Haven and London, 1988)
- Stone, J. and Brodie, L. *Tales of the Old Gardeners* (Newton Abbot, 1994)
- Stratton, M., Trinder, B. *Twentieth Century Industrial Archaeology* (London, 2000)
- Styles, J. *Titus Salt and Saltaire* (Saltaire, 1990)
- Sutton, G.B. *A History of Shoe Making in Street, Somerset: C. and J. Clark 1833-1903* (York, 1979)
- Sutton, S. B. (ed.) *Frederick Law Olmsted. Civilizing American Cities. Writings on City Landscapes* (New York, 1997)
- Tadajewski, M. and Brian Jones, D.G. (eds.) *The History of Marketing Thought*, (3 vols., Los Angeles, New York and London, 2008)
- Tarbell, I. M. *The History of the Standard Oil Company* (2 vols., Gloucester MA, 1963)
- Thompson, F.M.L *The Rise of Respectable Society: a Social History of Victorian Britain 1830-1900* (London, 1988)
- Tishler, W. H. (ed.) *American Landscape Architecture: Designers and Places* (Washington D.C., 1989)
- Tracy, L.H. *How my Heart Sang. The Story of Pioneer Welfare Work* (New York, 1950)
- Treib, M. *Settings and Stray Paths: Writings on Landscapes and Gardens* (London and New York, 2005)

- Trinder, B. (ed.) *The Encyclopaedia of Industrial Archaeology* (Oxford, 1992)
- Trinder, B. *Making of the Industrial Landscape* (London, 1997)
- Tuan, Y. *Space and Place* (London, 1977)
- Twentieth Century Society *Industrial Architecture* (London, 1994)
- Walker, J. *Design History and the History of Design* (London, 1989)
- Walker, P. and Simo, M. *Invisible Gardens: the Search for Modernism in the American Landscape* (Cambridge MA, 1998)
- Waller, P. J. (ed.) *The English Urban Landscape* (Oxford and New York, 2000)
- Waller, P.J. *Town, City and Nation. England 1850-1914* (Oxford, 1983)
- Ward, J. T. *The Factory System and Society* (2 vols., Newton Abbott, 1970)
- Ward, S.V. (ed.) *The Garden City. Past, Present and Future* (London, 1992)
- Ward, S.V. *Selling Places: the Marketing and Promotion of Towns and Cities, 1850-2000* (London, 1998)
- Way, T. (ed.) *Picturing Paradise: Studies in Eighteenth to Twentieth Century Gardens and Garden Design* (Cambridge, 2003)
- Waymark, J. *Modern Garden Design. Innovation since 1900* (London, 2005)
- Waymark, J. *Thomas Mawson: Life, Gardens and Landscapes* (London, 2009)
- Weightman, G *The Making of Modern London 1914-1939* (London, 1984)
- Wells, H.G. *A Modern Utopia* (London, 1952)
- Wells, L. *The Photography Reader* (London and New York, 2003)
- Wiebe, R.H. *Businessmen and Reform: a Study of the Progressive Movement* (Chicago, 1962)
- WGC Ltd *Welwyn Garden City* (1930) Plans and photographs
- Williams, E. *Port Sunlight Factory. The First Hundred Years 1888-1988* (Kingston-upon-Thames, Port Sunlight and Warrington, 1980)
- Williams, I. A. *The Firm of Cadbury* (London, 1931)
- Williams, R. *The Country and the City* (London, 1985)
- Wilson, W.H. *The City Beautiful Movement* (Baltimore and London, 1989)
- Wolschke-Bulmahn J. (ed.) *Nature and Ideology: Natural Garden Design in the Twentieth Century* (Washington D.C., 1997)
- Wood Roper, L. *Frederick Law Olmsted: a Biography* (Baltimore and London, 1973)
- Worpole, K. *Here Comes the Sun: Architecture and Public Space in 20th century European Culture* (London, 2000)
- Worpole, K *The Value of Architecture: Design, Economy and the Architectural Imagination* (London, 2000)
- Wrede, S. and Adams W.H. *Denatured Visions. Landscape and Culture in the Twentieth Century* (New York, 1991)
- Wynn, N. A. *Progressivism to Prosperity: World War I and American Society* (New York and London, 1986)
- Yates, J. *Control through Communication: The Rise of System in American Management* (Baltimore, 1989)
- Youngman, G. P. and Lord Verulam *Factory Gardens* (London, 1955)
- Zahavi, G. *Workers, Managers and Welfare Capitalism: the Shoemakers and Tanners of*

Endicott Johnson 1890-1950 (Urbana and Chicago, 1988)

Zukin, S. *Landscapes of Power* (Berkeley and Los Angeles, 1991)

5.0 SECONDARY SOURCES: JOURNALS, MAGAZINES AND NEWSPAPERS

Åkerblom, P. 'Footprints of School Gardens in Sweden' *Garden History* 32:2 (Winter 2004), 229-47

Barton, R. 'Gender, Skill and Trade-Unionism: Women Workers at Cadbury in Tasmania, 1920-51' *Historical Studies in Industrial Relations* 11 (Spring 2001), 37-62

Bhatti, M. et al "'I love being in the garden.'" Enchanting Encounters in Everyday Life' *Social and Cultural Geography* 10:1 (2009), 61-76

Bromhead, J. 'George Cadbury's contribution to Sport' *The Sports Historian* 20:1 (May 2000), 97-117

Bucci, F. 'Territories of Surveillance' in Gregotti, V. (ed.) 'Company Towns' *Rassegna* 70:II (1997)

Butterfield, R. 'The Shredded Wheat Factory at Welwyn Garden City' *Industrial Archaeology Review* XVI:2 (Spring 1994), 213

Cavallo, D. 'Social Reform and the Movement to Organize Children's Play during the Progressive Era' *History of Childhood Quarterly* 3:4 (1976), 509-522

Chance, H. 'The Angel in the Garden Suburb. Arcadian Allegory in the Girls' Grounds at Cadbury, Bournville 1880-1939' *Studies in the History of Gardens and Designed Landscapes* 27:3 (2007), 197-216

Clarsen, G. 'A fine university for women engineers': a Scottish Munitions factory in World War I *Women's History Review* 12: 3 (2003), 333-355

Conway, H. 'Everyday Landscapes: Public Parks from 1930 to 2000' *Garden History* 28:1 (2000), 117-134

Conway, H. 'The Manchester/Salford Parks: Their Design and Development' *Journal of Garden History* 5:3 (1976), 231-260

Conway, H. 'Sports and Playgrounds and the Problem of Park Design in the Nineteenth Century' *Journal of Garden History* 8:1 (1988), 31-41

Cosgrove, D.E. 'John Ruskin and the Geographical Imagination' *Geographical Review* 69:1 (January 1979), 43-62

Daniels, S. 'Landscaping for a Manufacturer. Humphry Repton's Commission for Benjamin Gott at Armley, 1809-10' *Journal of Historical Geography* 7:4 (October 1981), 379-88

Davidson, L. 'A Quest for Harmony. Music and dancing at Robert Owen's New Lanark Community' *Utopian Studies* (forthcoming, 2011)

Davis, T. 'The Bronx River Parkway and photography as an instrument of landscape reform' in *Studies in the History of Gardens and Designed Landscapes* 27:2 (April – June 2007), 113-141

Dellheim, C. 'The Creation of a Company Culture. Cadbury 1861-1931' *The American Historical Review* 92:1 (Feb 1987), 13-44

Elkins, J. 'On the conceptual analysis of gardens' *Journal of Garden History* 13:4

- (Winter 1993), 189-98
- Elliott, D.W. 'Servants and Hands: Representing the Working Classes in Victorian Factory Novels' *Victorian Literature and Culture* (2000), 377-390
- Gagen, E. A. 'Making America Flesh: physicality and nationhood in early twentieth-century physical education reform' *Cultural Geographies* 11 (2004), 417-442
- Gems, G. 'Welfare Capitalism and Blue Collar Sport' *Rethinking History* 5:1 (2001), 43-58
- Harwood, E., Williamson, T., Leslie, M. and Dixon-Hunt J. 'Whither garden history?' *Studies in the History of Gardens and Designed Landscapes*.27: 2 (April-June 2007), 91-112
- Hopkins, E. 'Working Class Life in Birmingham between the Wars, 1918-1939' *Midland History* XV (1990), 129-149
- Institute of Landscape Architecture (I.L.A.) 'Commercial Gardens' *Landscape and Garden* (I:IV Winter 1934), 48-9
- Institute of Landscape Architecture (I.L.A.) 'Industrial Gardens' *Landscape and Garden* III: IV (Winter 1936), 230-3
- Jordan, H. 'Public Parks, 1885-1914' *Garden History* 22:1 (1994), 85-11
- King, W.H. and Nelson, E.C. 'William Robinson in North America 1870' *Studies in the History of Gardens and Designed Landscapes* 24:2 (April-June 2004), 116-132
- Klaus, S. L. 'All in the Family: The Olmsted Office and the Business of Landscape Architecture' *Landscape Journal* 16:1 (1997), 80-95
- Knapp, R. F. 'Municipal Recreation: Background of an Era' *Parks and Recreation* VII:8 (1972), 14-19, 44-52
- Lawson, L. 'The Planner in the garden: A Historical View into the Relationship between Planning and Community Gardens' *Journal of Planning History* 3:2 (2004), 151-176
- Le Bas, E. 'The Making of a Socialist Arcadia: Arboriculture and Horticulture in the London Borough of Bermondsey after the Great War' *Garden History* 27:2 (Winter 1999), 219-237
- Littmann, W. 'Designing Obedience: The Architecture and Landscape of Welfare Capitalism, 1880-1930' *International Labor and Working-Class History* 53 (Spring 1998), 88-114
- Lynch, E. C. 'Walter Dill Scott: Pioneer Industrial Psychologist' *Business History Review* XLII: 2 (Summer 1968), 149-170
- MacGill, L. 'The Emergence of Public Parks in Keighley, West Yorkshire, 1887-93: Leisure, Pleasure or Reform?' *Garden History* 35:2 (2007), 146-159
- McCreary, E. C. 'Social Welfare and Business. The Krupp Welfare Programme 1860-1914' *Business History Review* 42:1 (Spring 1968), 24-49
- Meadville Tribune*, 11 March 1987
- Morgan, W. J. 'The Miners' Welfare Fund in Britain 1920-1952' *Social Policy and Administration* 24:3 (December 1990), 199-211
- Murphy, M.T. 'The History of Employee Services and Recreation' *Parks and Recreation* 19:8 (August 1984), 35-9
- Neer, D. L. 'Recreation in the Age of Automation' *Annals of the American Academy of Political and Social Science* 313 (September 1957), 79-82
- Nelson, D. 'The New Factory System and the Unions: the National Cash Register Company Dispute of 1901' *Labour History* 15:2 (1974), 163-178

- Park, J. 'Sport, dress reform and the emancipation of women in Victorian England: A Reappraisal' *The International Journal of the History of Sport* 6:1 (1989), 10-30
- Park, R. J. 'Blending business and basketball: industrial sports and recreation in the United States from the late 1800s to 1960' *Stadion* 3:11 (2005), 35-49
- Park, R.J. "'Boys' clubs are better than Policemen's clubs": endeavours by philanthropists, social reformers and other to prevent juvenile crime, the late 1800s to 1917' *International Journal of the History of Sport* 24:6 (June 2007), 749-775
- Pavitt, J. 'The Bata Project: a Social and Industrial Experiment' *Twentieth Century Architecture: the Journal of the Twentieth Century Society* 1 (Summer 1994), 33-44
- Pearson, A. M. 'Historic Pullman's *Other Architect: Nathan Franklin Barrett Illinois Heritage* (2005), 20-5
- Phillips, S. "'Fellowship in Recreation, Fellowship in Ideals" Sport, Leisure and Culture at Boots Pure Drug Company, Nottingham c. 1883-1945' *Midland History* XXIX (2004), 107-123
- Preston, R. "'Hope you will be able to recognise us": the representation of women and gardens in early twentieth-century British domestic "real photo" postcards' *Women's History Review* 18:5 (November 2009), 781-800
- Preston, R. 'Little English landscapes: developing suburban gardens between the wars' *Things, a Journal of Material Culture* 2 (Summer 1995), 69-85
- Rees, A. 'Nineteenth Century Planned Industrial Communities and the role of Aesthetics in Spatial Practices: The Visual Ideologies of Pullman and Port Sunlight.' *Journal of Cultural Geography* (forthcoming, 2011)
- Rutherford S. 'Landscapes for the Mind: English Asylum Designers, 1845-1915' *Garden History* 33:1 (Summer 2005), 61-86
- Schleppi, J.R. "'It Pays": John H. Patterson and Industrial Recreation at the National Cash Register Company' *Journal of Sports History* 6:3 (Winter 1979), 20-28
- Sugg Ryan, D. "'Pageantitis": Frank Lascelles' 1907 Oxford Historical Pageant, Visual Spectacle and Popular Memory' *Visual Culture in Britain* 8:2 (2007), 63-82
- Tinkler, P. 'Cause for Concern. Young Women and Leisure, 1930-50' *Women's History Review* 12:2 (2003)
- Trelstad, B. 'Little Machines in Their Gardens: A History of School Gardens in America, 1891 to 1920' *Landscape Journal* 16:2 (Fall 1997), 161-73
- Way, T. 'Designing Garden City Landscapes: Works by Marjorie L. Sewell Cautley, 1922-1937' *Studies in the History of Gardens and Designed Landscapes* 25:4 (2005), 297-316
- White, L.M. 'The Landscape of Industry: Factories' *Landscape and Garden* 57:1 (February 1962), 4-9
- Whiting, E.C. and Phillips, W.L. 'Frederick Law Olmsted 1870-1957. An Appreciation of the Man and his Achievements' *Landscape Architecture* 48:3 (April 1958), 145-157
- Williams, R. 'Edwardian gardens, old and new' *Journal of Garden History* 13:1/2 (Spring/Summer 1993)
- Wolschke-Bulmahn, J. 'Ethics and Morality. Questions in the History of Garden and Landscape Design: A Preliminary Essay' *Journal of Garden History* 14:3 (1994), 140
- Yerbury, F. 'Thomas Wallis' Obituary' *Journal of the RIBA* 60:11 (1953), 465-6
- Young, T. 'Social reform through parks: the American Civic Association's program for a better America' *Journal of Historical Geography* 22:4 (1996), 460-471

- 'J. P. Youngman Obituary' *The Guardian* (Friday 17 June, 2005)
- Wolschke-Bulman, J. 'Ethics and Morality Questions in the History of Garden and Landscape design: a Preliminary Essay' *Journal of Garden History* 14:3 (1994), 140-146
- Woudstra, J. 'The Corbusian Landscape: Arcadia or No Man's Land?' *Garden History* 28:1 (Summer 2000), 135-151
- Young, T. 'Social Reform through Parks: the American Civic Association's Program for a better America' *Journal of Historical Geography* 22:4 (1996), 460-472
- Young, T. 'Trees, the Park and Moral Order: the Significance of Golden Gate Park's First Plantings' *Journal of Garden History* 14:3 (1994), 158-170

6.0 THESES AND PAPERS

- Chance, H. "'Consulting the Genius of the Plant.'" Uniting the machine and the garden in Utopia' Unpublished paper given at 'Utopias and Modernism: Convergences in the Arts' University of Birmingham, 23-24 April 2010
- Bhatti, M. and Church, A. 'I never promised you a rose garden': Gender, leisure, and home-making' (Unpublished paper, School of Applied Social Sciences, University of Brighton, 2004)
- Hagen, M.A. 'Industrial Harmony through Sports: the Industrial Recreation Movement and Women's Sports' (PhD, The University of Wisconsin, Madison, 1990)
- Hickman, C. "'They are Surrounded with Garden Space, and Add not Only to the Beauty but to the Healthiness of the City.'" An Exploration of the Relationship between Notions of Health and Disease and the Role of Green Space in Late Nineteenth-Century Utopian Texts. (Unpublished lecture, presented at the Institute for Historical Studies, London, January 2008)
- Hoffman, J. M. 'Imaging the Industrial Village: Architecture, Art, and Visual Culture in the Garden Community of Bournville, England' (PhD Yale, 1993)
- Jessup, K. L. 'The New England Domestic Landscape of 1876 to 1917, and the Influence of the British Idyll' (PhD De Montfort University, 2005)
- Philips, S. 'Industrial Welfare and Recreation at Boots Pure Drug Company 1883-1945' (PhD Nottingham Trent University, April 2003)
- Rees, A. 'Nineteenth Century Planned Industrial Communities and the Role of Aesthetics in Spatial Practices: Beaux Arts Pullman and Arts and Crafts Port Sunlight' (Columbus, GA Department of History and Geography, Columbus State University, 2008), 1-32

7.0 EXHIBITION CATALOGUES

- Alfrey, N., Daniels, S., Postle, M. *Art of the Garden* (London, 2004)
- Brougher, K. *Enclosed and Enchanted* (Oxford, 2000)
- Pavitt, J. (ed.) *Brand New* (London, 2000)
- Taylor, J. *Pictorial Photography in Britain 19000-1920* (London, 1978)
- Thomas H. Mawson. *A Northern Landscape Architect 1861-1933* (Lancaster, 1978)
- Wilk, C. (ed.) *Modernism. Designing a New World* (London, 2006)

8.0 CONFERENCES AND SEMINARS

- ‘Home and Garden’ Study Day, Geffreye Museum (16 June 2007)
- ‘Return of Suburbia’, Middlesex University, Museum of Domestic Architecture (18 March 2006)
- ‘Private and Public Spaces in the Industrial Landscape’, University of Bristol (14 March 2009)
- ‘Utopias and Modernism: Convergences in the Arts’, University of Birmingham (23-24 April 2010)

9.0 EXHIBITIONS AND MUSEUM VISITS

- ‘Art of the Garden’ Tate Britain, London (2 July 2004)
- Industrial complex and house of William Champion - Kingswood Heritage Museum, Glos., (10 September 2006)
- ‘In Search of Suburbia’ MODA, Middlesex University (11 October 2005 – 26 March 2006)
- Pullman exhibition at the Historic Pullman Visitor Centre Pullman, Illinois (Summer 2008)
- ‘Shell advertising posters, 1920s and 1930s’ Upton House, Banbury (National Trust) (Summer 2002)
- Styal Mills, near Manchester. Tour of Apprentice House (5 August 2006)

10.0 INTERVIEWS AND CORRESPONDENCE

- Erik Allen, retired head gardener of the Bata Estate, East Tilbury (4 August, 2007)
- Bill Anderson, President, then CEO and Chairman of the NCR 1972 – 1984, email correspondence (22 July, 2010)
- Sir Adrian Cadbury at his home (17 April, 2009)
- Dolly Green, The Quadrangle, the Bournville Village Trust almshouses (30 November, 2009)
- Alan Shrimpton, Bournville Village Trust Archivist, Bournville (26 November, 2009)

11.0 PAMPHLETS AND REPORTS

- Kessler, B. and Zang, D. *The Play Life of a City: Baltimore's Recreation and Parks 1900-1955* (Baltimore City Life Museums and Baltimore City Department of Recreation and Parks, c.1989)
- Low, J. ‘Description and Analysis of Ovaltine Factory Kings’ Langley, Herts’ (Historic Building Record, 2004)
- Warmley Conservation Area Advice Note 30* (South Gloucestershire Council, 1998)

12.0 FILMS

Mitchell and Kenyon 28 'Employees of Messrs Lumb and Co Leaving the Works, Huddersfield' (1900). BFI DVD: Electric Edwardians: The Films of Mitchell and Kenyon (2005). Wool factory gate.

'Planned Town' 'Supervised by Louis de Soissons' (Welwyn Garden City). A GB Instructional Production Ltd. Written and directed by Sean Graham. J. Arthur Rank Organisation Ltd.

Spender, Humphrey 'Worktown'. Bolton Museum's website (<http://boltonmuseums.org.uk/index.html>, accessed 16.05.10)

13.0 ONLINE RESOURCES

Calderdale Council website, 'Sunny Vale Pleasure Gardens' (www.calderdale.gov.uk/leisure/localhistory/glimpse-past/parks/sunnyvale.html, accessed 5 June, 2007)

Klaus, S.L. 'Olmsted, Frederick Law, Jr.' American National Biography Online (www.amb/articles/17/17-00637, accessed 14 April, 2009)

Mass Observation 'An Enquiry into People's Homes' (London, 1943) pp. 16-17 Mass Observation Online; Adam Matthew Digital Online Resource (<http://www.amdigital.co.uk/collections/Mass-Observation-Online/>, accessed 4 October 2010)

Tameside local government (<http://www.tameside.gov.uk/ashton/history>, accessed 15 July 2010)

Wisconsin Genealogy (<http://www.wisconsin-genealogy.net/racine/horlick-malted-milk-company>, accessed 15 July 2010)

Picture credits

Title Page: *DIA Quarterly Journal* 4 (July 1928) Front cover

Fig. 0.1 1887 OS Map County Series First Edition, Worcestershire. OS Grid SP07. Digimap, <http://edina.ac.uk/digimap/> accessed 8 July 2011

Fig. 0.2 1938 OS Map County Series Third Revision, Warwickshire. OS Grid SP07. Digimap <http://edina.ac.uk/digimap/> accessed 8 July 2011

Fig. 0.3 Map Collection, Dayton History Reference, Dayton Metro Library. Cabinet 2, Drawer 1, Folder 2, Item 5 (1901)

Fig. 0.4 1925 OS Map County Series Second Revision, Bedfordshire. OS Grid TL12. Digimap <http://edina.ac.uk/digimap/> accessed 8 July 2011

Fig. 0.5 Reference Department, Niagara Falls Public Library, Ontario

Fig. 0.6 1939 OS Map County Series Third Revision, Hertfordshire OS Grid TL21. Digimap <http://edina.ac.uk/digimap/> accessed 8 July 2011

Fig. 0.7 Geography and Map Division, Library of Congress, Washington, DC, Sanborn Map Collection

Fig. 0.8 Geography and Map Division, Library of Congress, Washington, DC, Sanborn Map Collection

Fig. 1.1 Author's photograph

Fig 1.2 New Lanark Trust

Fig 1.3 Manchester City Art Galleries

Fig 1.4 Author's photograph

Fig 1.5 Library of Congress Prints and Photographs Division, Washington DC (<http://www.loc.gov/pictures/item/94515606/>, accessed 20 September 2010)

Fig 1.6 Rogers, *A Century of Progress*, 58

Fig 1.7 NCR.DH.fl

Fig. 1.8 NCR.DH *The NCR* X: 20 (15 October 1897)

Fig 2.1 William Varieka Fine Arts Ltd, Newport, RI (www.vareikafinearts.com, accessed 20 September 2010)

Fig 2.2 Author's photograph

Fig 2.3 Author's photograph

Fig 2.4 Lowell Historical Society
(www.historycooperative.org/journals/llt/48/08little.html, accessed 20 June 2010)

Fig. 2.5 PSHS no. 8014

Fig. 2.6 PSHS Sanborn Maps Sheet 69

Fig 2.7 PSHS no. 7963

Fig. 2.8 PSHS no. 11082

Fig 2.9 PSHS no 10304

Fig 2.10 Author's photograph

Fig. 2.11 Purdom, *The Building of Satellite Towns*, 33

Fig. 2.12 Purdom, *The Building of Satellite Towns*, 279

Fig 2.13 FGCHM

Fig 2.14 Ealing Library, Local History Centre, T109 504/7

Fig. 2.15 *Journal of Industrial Welfare* III (Feb 1921), p. 63 UW.MRC

Fig. 2.16 CB Postcard S30 003413

Fig 2.17 CB Postcard S30 003413

Fig. 2.18 CB Postcard S30 003413

Fig. 2.19 *Souvenir of Bournville* Bodleian Library G.A. Worc. 8° 134

Fig. 2.20 CB maps and plans. Cheal's drawing no. 14. No. 3260.

Fig. 2.21 CB maps and plans. Drawing no. 35730

Fig. 2.22 CB *Bournville at Work and Play*, 37

Fig. 2.23 CB *BWM XXXI*: 8 (August 1933) frontispiece

Fig. 2.24 NCR.DH.lgl

Fig. 2.25 NCR.DH.lgl

Fig. 2.26 NCR.DH.lgl

Fig. 2.27 NCR.DH.lgl

Fig 2.28 Shredded Wheat (c.1905), back cover. Author's archive

Fig. 2.29 NCR.DH.fl

Fig. 2.30 Mill Green Museum, Hatfield, Herts.

Fig 2.31 FGCHM Spirella 33

Fig 3.1 Postcard, Racine Wisconsin USA, c. 1914 (<http://www.timepassagesnostalgia.com/>, accessed 24 June 2010)

Fig 3.2 'The Social History of Postcards in Beverly' (www.primaryresearch.org, accessed 24 June 2010)

Fig. 3.3 NCR.DH.lgl

Fig. 3.4 BI.RC Photographs 409 1910

Fig. 3.5 FGCHM 2004.51.27

Fig 3.6 King's Langley Local History and Museum Society/Hertford Museum

Fig. 3.7 King's Langley Local History and Museum Society/Hertford Museum

Fig 3.8 FGCHM *The Spirella Magazine* XX1: 8 (August 1932), p. 117

Fig 3.9 BI.RC Photographs 2160 1925; 6803 1913

Fig. 3.10 BI.RC Photographs 1954 1929

Fig 3.11 Shredded Wheat *The Wonders of Niagara Scenic and Industrial* (c.1910) Author's collection

Fig. 3.12 CB *Factory in a Garden* (1950s) 000 000026

Fig. 3.13 NCR.DH.lgl

Fig. 3.14 NCR.DH.lgl

Fig. 3.15 NCR.DH.lgl

Fig. 3.16 Ian Ormerod archive

Fig. 3.17 FLO.NHS 00280; 280-112

Fig. 3.18 NCR.DH

Fig. 3.19 King's Norton Tithe Map, Moundsley Yield (West), Sheet 1 (of 2) Birmingham Library Services. Local Studies History and Archives

Fig. 3.20 CB 020 000102

Fig. 3.21 CB 020 000102

Fig. 3.22 CB *Bournville Works Magazine* XXXVI: 6 (June 1938)

Fig. 4.1 FGCHM 2004.51.36

Fig. 4.2 Meakin, *Model Factories*, 94

Fig 4.3 Meakin, *Model Factories*, 95

Fig. 4.4 Meakin, *Model Factories*, 225

Fig. 4.5 BI.RC photographs 154 1970

Fig. 4.6 CB Photographs 020 000102

Fig. 4.7 NCR.DH.fl

Fig. 4.8 New Lanark Export Label, 1818 from an original by John Winning. New Lanark Trust

Fig. 4.9 CB Photographs 020 000102

Fig. 4.10 CB *Bournville. An Invitation* (1937), pp. 56-7 000 000024

Fig. 4.11 CB Lantern slide 000 9999

Fig. 4.12 NCR.DH 'President Patterson's Welcome Home' *The NCR* XII: 23 (1 December 1899), p. 566

Fig. 4.13 FGCHM *The Spirella Magazine* XXI: 10 (October 1932), p. 149

Fig. 4.14 CB Lantern slide 000 9999

Fig. 4.15. NCR.DH

Fig. 4.16 NCR.DH.lgl

Fig. 4.17 NCR.DH.lgl

Fig. 5.1 CB Photographs 020 000102

Fig. 5.2 Court Barn Museum, Chipping Camden, Gloucestershire

Fig. 5.3 Nottingham City Museums and Galleries. John Player Collection. P769-22

Fig. 5.4 CB Lantern slide 000 9999

Fig 5.5 CB *The Factory in a Garden* (c.1912) Bodleian Library G.A. Worc. 8° 72 (1)

Fig.6.1 CB Maps and plans

Fig. 6.2 CB Maps and plans. Drawing no. 11725

Fig. 6.3 CB Maps and plans (no plan no.)

Fig. 6.4 CB Lantern slide 000 9999

Fig. 6.5 CB *BWM XXXIV: 10* (October 1936) frontispiece

Fig. 6.6 NCR.DH.fl

Fig 6.7 NCR.DH.fl

Fig. 6.8 NCR.DH *NCR Country Club Programme of Activities*

Fig 6. 9 NCR.DH *Hills and Dales* (no date)

Fig. 6.10 NCR.DH.lgl

Fig. 6.11 FLO.NHS NCR 00280 - 280-107

Fig. 6.12 FLO.NHS 00280 - 280z4-pt1

Fig. 6.13 FLO.NHS 00280 - 280z4-pt1

Fig. 6.14 FLO.NHS 00280 Folder No. 2, photograph album 1937-8

Fig. 6.15 FLO.NHS 00280 Folder no. 4, photograph album 1953-56

Fig. 7.1 Hagley Library *Century of Progress International Exposition. Official Book of the Fair Chicago 1932-3*, 92.68

Fig. 7.2 *Harvester World* (September 1914), p. 20. Wisconsin Historical Images: W6i-7605 Wisconsin Historical Society (www.wisconsinhistory.org, accessed 15 July 2010)

Fig. 7.3 Cereal Partners UK/Nestlé archive, Welwyn Garden City

Fig. 7.4 Rogers, *A Century of Progress*, 31

Figs. 7.5 – 7.9 Cereal Partners UK/Nestlé archive, Welwyn Garden City

Fig. 7.10 Author's collection and photograph

Fig. 7.11 CB *Bournville. A Review* (1921) 020 002757

Fig. 7.12 NCR.DH.fl

Fig. 7.13 NCR.DH.fl

Fig. 7.14 NCR.DH.lgl

Fig. 7.15 NCR.DH.bgl

Fig. 7.16 NCR.DH.bgl

Fig. 7.17 NCR.DH.lgl

Fig. 7.18 NCR.DH.lgl

Fig. 7.19 NCR.DH *The NCR* XV: 4 (15 February 1902), p. 108

Fig. 7.20 NCR.DH *The NCR* 10: 20 (15 October 1897), front cover

Fig. 7.21 CB *Bournville. A Review* (1921) 020 002757

Fig. 7.22 CB Photographs 020 000102

Fig. 7.23 George Eastman House Still Photograph Archive,
(http://www.geh.org/ne/mismi3/m198111220003_ful.html, accessed 20 June 2010)

Fig. 7.24 CB Photographs 020 000102

Fig. 7.25 NCR.DH.lgl

Fig. 7.26 NCR.DH

Fig. 7.27 NCR.DH.lgl

Fig. 7.28 NCR.DH.lgl

Fig. 7.29 Ovaltine Archive, Hertford Museum

Fig 7.30 Ovaltine Archive, Hertford Museum

Fig 7.31 NCR.DH *The NCR* XI: 4 (April 1925), front cover

Fig 7.32 NCR.DH *The NCR* XI: 10 (October 1925), front cover